

Job title	Welsh Renewable Energy Meeting	Job number 112223
Meeting name & number	Steering Panel Mtg No 3 3/03	File reference 9.11
Location	Llandinam	Time & date 10:30 8 January 2003
Purpose of meeting	To discuss Progress to date	
Attendance	TAG Members, Arup plus sub-consultants	
Circulation	Those attending	

- 1. Apologies
- 2. Matters Arising
- 3. Minutes of the last meeting
- 4. Presentation by Arup -Comprising
 - Introduction/programme
 - Results of Consultation with Planning Officers AB+SJP- A short update by Andy Bull of his visits to Planning Authorities in Wales
 - Interpreting the renewable Energy targets on a practical basis- SJP
 A view about what meeting the targets might mean in practice
 - Planning approaches criteria, preferred areas and areas of search
 SJP A review of different approaches to dealing with spatial planning
 - Onshore wind Visual, cumulative and landscape issues –
 review of criteria relevant and questions still remaining
 - Constraint Planning for onshore wind Preferred Areas approach
 SJP A run through mapping of graduated constraints and how this affects Wales using maps. Biomass resources
 - Lunch
 - Criteria for offshore wind and tidal stream in the Marine Environment – SB – Building upon the Crown Estates WindBase data
 - A GIS tool? Where this leaves GIS in the research process
 - Questions/Discussion and next steps
- 5. AOB and then TAG Meeting
- 6. Aiming to finish by 3.00-3.30pm

Prepared by

Simon Power

Date

8 January 2003

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TO

3 January 2003

From

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Job No/Ref

112223/sjp File Ref

5.60

Subject

Welsh Renewables Study

BWEA - Comments on Planning Approaches

Page 1 of 3

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Dear Joanne

Roday to discuss the BWEA position. In BWEA Comments as discussed. I have met with summary we still maintain our view that 'preferred area identification' is likely to be the best way forward for Wales, particularly as contrary to ODPM, WAG may link such areas more tightly to policy advice.

I think the last point under the PRO's for criteria based policies sums up the main driver for BWEA and indicates why such an approach may be inappropriate for Wales, where we have a large number of existing wind energy developments and further 'allocations' would need to be considered very carefully if remaining landscape resources are not to be compromised

No doubt this is material for further discussion at any rate



Update, 18th Dec 02

The ultimate aim of this project is to facilitate planning for renewable energy in Wales. The Nation has a target to meet by 2010, and our role is to assist the Assembly and local planning authorities in their work to meet that target.

The original brief envisaged that Arup and its sub-consultants would create an interactive GIS tool i.e. some kind of sieve mapping tool that collated different data layers and presented the opportunity for the user to show different layers as more significant constraints than others. It was envisaged that individual planning authorities and other interested parties would manipulate the tool to change the weightings when considering the optimum locations for renewable energy schemes in certain parts of Wales. This is an appealing idea but it has become apparent that this is not what planners would find most useful and may even provide an opportunity for local procrastination meeting forthcoming renewable energy targets.

As the project has progressed, Arup/Welsh Assembly Government have undertaken informal consultations with local authority planners/CCW and held further meetings internally. Further consultation has also been undertaken with Scottish Natural Heritage and information has been gathered about other UK regions' approaches to the problem.

It would appear that what local authority planners would appreciate most is a clear steer on how to react to renewable (mainly onshore wind) energy applications when they arrive on their desks, or how to address renewable energy in UDP policy. What would be useful (and will be addressed in the TAN, independently of this project) is clear guidance on the technical requirements and potential impacts of renewable energy schemes. Furthermore, planning officers have been expressing frustration that Councillors on planning committees frequently overrule officer recommendations to approve renewable energy schemes, for local political reasons. Firm local policies and allocations in response to WAG guidance would help to resolve this.

In addition to the written guidance (being prepared by WAG as part of the TAN process), Arup is proposing that a set of maps are appended to the TAN identifying areas in Wales which would be most suitable for renewable energy schemes (specifically, onshore wind; biomass plants are generally regarded as industrial development and therefore subject to regular planning application considerations). These maps would comprise 3 plans at say 1:250000 scale showing variously:

- wind resource (i.e. speeds at a specific height yet to be determined)
- national grid network (and capacity?)
- areas categorised according to constraint on a 4 point scale.

A key debating point is the degree to which wind resource and the grid location/capacity can be considered variable factors. The Arup team is of the view that the emphasis of WAG Planning Advice should be to identify those areas which are least constrained in the first instance. Other parts of the Assembly should consider working with developers/utilities and funding bodies to ensure that projects can be delivered in these 'preferred areas' through grid reinforcement or development of larger/higher turbines.

These maps will be created by using a GIS (at present they exist as hard copy overlays), but would be 'fixed' in the TAN and unable to be altered by local authorities or any other interested parties (except though the consultation process on the Draft TAN). The maps would be a 'material consideration' in the planning system and would be used by regional groupings of Unitary Authorities in preparing and updating their Unitary Development Plans. It is envisaged (as per Planning Policy Wales para 12.9.4) that UDPs would indicate broad locations or specific areas where wind developments are likely to be permitted. This would provide planning officers with greater support when recommending approval for renewables applications and provide more certainty in the planning process for developers. The debate about location issues re: onshore wind should therefore move up a level to the UDP inquiry, or ideally be resolved by regional groupings of



authorities working together before the UDP process.

Normal GIS functionality (eg. overlays and buffering) should be sufficient to allow sensitivity testing of the different constraints within the consultant team in order to inform final map production.

The process as described above depends upon the apportionment of the 2010 Welsh Renewables Target in two ways:

- a) by renewable resource (i.e. onshore/offshore wind/biomass etc) and
- b) by region or possibly Unitary Authority area.

The mechanism for this apportionment is yet to be decided. Arup is considering this with respect to both, but particularly b), where some element of landscape capacity is a factor. Wales has varying amounts of different landscape types and it may not be desirable in policy terms to affect (whether positively or negatively) all of one type of landscape resource to such an extent that its character/wildness etc. is compromised. This raises a number of questions such as does the final constraints map need to identify land to meet the onshore proportion of the 10% target regardless ultimately of capacity issues? If so, this may mean the 'downgrading' of some constraints. If not, is it acceptable to conclude that Wales should not plan to meet its 10% target? This is a possibility given the potential offshore constraint issues.

Initial work is indicating that the Denbigh Moors, North and EastMontgomeryshire and East Radnorshire (both Powys), the Ceredigion Coastal Plateau, North Camarthenshire, Neath Port Talbot, Bridgend, Caerphilly. West Wrexham and Central Pembrokeshire are authorities which might combine in one or more groupings to discuss apportionment.

The Landscape capacity/characterisation debate is key. Beyond statutorily protected landscapes (National Parks, AONBs) and nationally identified non statutory landscapes (Historic Landscapes), Special Landscape Areas are currently used by most Unitary Authorities as a proxy for quality landscapes. However, these are allocated by individual local planning authorities across Wales and are therefore not wholly comparable from one part of the country to another. CCW's LANDMAP methodology may provide a long term answer, but it is not without its critics (because of its perceived subjective element) and it will not be fully available for a number of years. The Arup team is therefore expending effort within this area of 'regionally significant landscapes' and is presently considering a number of approaches, such as 'wild area mapping'.

Jillian Hastings Planner Arup Cardiff 4 Pierhead Street Capital Waterside Cardiff CF10 4QP

By fax to 029 2047 2277 and by first class post

Dear Jillian

As requested, please find set out below some thoughts on the minutes and PowerPoint presentation from the last meeting of the TAN8 Technical Advisory Group. I am copying these to Joanne Smith at the National Assembly for Wales. I apologise for the late arrival of these comments and hope that they are helpful to you and your team.

Comments on the minutes of the TAG meeting on 8 November 2002

Areas of search for renewable energy

Minute 4:

recently commented on a new policy for RE in Aberdeenshire, which employs a four-tier approach, judged by level of designation, with no absolute presumption against RE development anywhere. We shouldn't exclude areas outside the formal 'areas of search': instead, presume against development in the highest landscape value areas, and in favour in the lowest".

This is consistent with National Parks enjoying the highest status of protection in terms of landscape and scenic beauty¹. Adopting a similar approach in Wales would introduce a clear presumption against large-scale RE schemes in National Parks, which would be highly likely to conflict with their statutory purposes but it would allow small scale and appropriate RE development in National Parks. More could be done to facilitate the development of small-scale RE in the Parks. Guidance should make it clear that there should not be a blanket RE ban in National Parks but that RE development should be appropriate in scale, location and design and that large schemes will not be considered acceptable/presumed against. Examples of small-scale RE development in National Parks are beginning to emerge from the Environment Development Fund.

Landscape character approach to assessment

Minute 5:

In this minute, ' lapparently contradicts himself, having (above) acknowledged "landscape value", it seems that he is opposed to a landscape character assessment approach, as he considers that it means "allocating a policy level of constraint on subjective assessment of landscape characteristics".

While landscape value/characteristics are subjective values, their use is well established and accepted (e.g. the Countryside Agency's guidelines). It is relevant to note here the National Assembly's recent moves to place value on how people perceive their well being - measured in part by health statistics but also in part by whether people feel content/healthy/safe etc.

¹ Para. 5.3.6 of PPW and para. 7 of Circular 13/99

It is relevant to note that National Parks are designated because of their <u>qualities</u>. The National Trust and its partners made a good attempt with the *Valuing the Environment* report to measure the economic benefits of the natural beauty and cultural heritage aspects of the environment (including landscape).

Numbers don't always demonstrate overall value. The National Assembly's National Economic Development Strategy has acknowledged that GDP does not measure value and that as a consequence has pledged to consider other indices to chart whether the economy is moving in the direction of sustainable development.

Beauty and appreciation of it (e.g. landscape, music, art, poetry, dance, flora, and fauna) gives rise to subjective feelings that are nonetheless fundamental to our lives. The WDA and the Welsh Assembly Government have noted on several occasions that a high quality landscape is one of Wales's greatest economic assets. Numerical values are difficult to ascertain because access to the landscape is mostly free of (monetary) charge.

This is recognised in the following quotes:

"sense of identity – of place – not only reinforces the cultural integrity of Wales, it is vital to environmental quality, to tourism and the quality of life of residents – and therefore to the image and economic well-being of the Principality" (*Landscapes Working for Wales*, WDA).

"the physical environment in Wales is a priceless economic asset which needs to be maintained and enhanced for the benefit of all. It produces economic 'goods' such as wildlife and landscape, which are important to the quality of life and economic well-being of those living and working in Wales. It also provides the raw materials for economic growth and the space in which economic activities take place. The environment must be properly and positively managed." (Proposals for a NEDS, Wales European Taskforce)

Offshore projects

Minute 8:

j: offshore marine schemes (other than wind) not considered viable within the next 5-10 years". This minute would appear to illustrate one of the reasons why the tidal scheme off the Pembrokeshire Coast that received Environment Development Funding for R&D has not moved forward in a satisfactory way. The WDA's lack of interest is not helping the development of innovative offshore RE schemes (although CNP notes that the DTI and international funders are showing a significant amount of interest).

Other potential layers for the GIS

Minute 10:

LANDMAP is subjective and never 'taken to task'; Historic Landscape Areas are created by an unelected body creating a policy document."

It should be noted that the WAG must often contract work externally. Work prepared by consultants or by an ASPB doesn't automatically become WAG policy. The WAG has a choice in each case whether or not to endorse these reports/projects/tools. CNP notes that the EPT Minister Sue Essex AM has said publicly that she fully supports LANDMAP.

Visual and cumulative impact

many a support of the

Minute 10:

" developments on the boundary of National Parks can affect them, according to legislation. It in policy terms though, 'a boundary is a boundary'".

There are several relevant development control decisions on developments adjacent to National Park boundaries which have been refused planning permissions partly or mainly because of the adverse impact that they would have on the setting of a National Park.

The Hobhouse Report (1947) was the first to recognise the importance of protecting this sensitive boundary zone when it stated that

"the boundary of a National Park should not be regarded as a sharp barrier between amenity and recreational values within, and disregard of such values without".

Section 11A of the 1949 National Parks and Access to the Countryside Act places a general duty on all relevant authorities, including the National Park Authorities, statutory undertakers and other public bodies, to have regard to National Park statutory purposes. By conferring a duty 'to have regard to National Park purposes' on bodies that may operate partly or wholly outside the National Parks, the Government has clearly accepted that activities outside the Parks can have a detrimental impact on Park purposes.

The landscape immediately surrounding the National Park is inextricably linked to that actually designated and special considerations must apply in any decision-making tool to the sensitive boundary zones surrounding National Parks.

Biomass for CHP

Minute 11:

targets for Wales are 4TWh for electricity; 1TWh for heat". It should be noted that there are no targets for Wales, only draft targets in the EDC's RE report, to which the Welsh Assembly Government has yet to respond.

Comments on the PowerPoint presentation: facilitating planning for renewable energy (These comments are made without the benefit of having heard the presentation!)

Slide 4: which phase are we in now?

Slide 8: could everything be put in TWh now - easier for comparison?

Slide 11: PPW has been published in final form.

Slide 14: Cumbria guidance - mention 'vertical features' e.g. trees, pylons etc, but not relative height of these structures of wind turbines. Big turbines make 'vertical' trees look like shrubs - so not very helpful in the way it's put! Also this slide doesn't mention National Parks or landscape policy even though the slide is all about landscape, so I am not clear what its purpose is.

Slide 26 onshore - slide context not clear. Why use a minimum wind speed of 7 m/s? Why a buffer of 100m round roads/rivers? This is certainly not the case in other countries (e.g. the Netherlands) where they're very close to roads. I am concerned that there is no buffer zone around the NPs. And how have you established that assumptions 1, 2, 6 apply to Wales? (ditto for slide 37 on offshore).

Slide 30 windbase - what's the difference between windbase and landmap (apart from being offshore)?

Slide 39 questions - why are biomass and MoD thought not to be possible to be dealt with through planning?

Slide 40 landmap - Sue Essex has already said she wants all Local Authorities to adopt it, so I'm not clear what this question's about.

I hope that the above comments are helpful. Please do not hesitate to contact me should you require clarification of any of the above or any further information.

I look forward to seeing you in mid Wales on Friday 10 January.

Yours sincerely

Deputy Director

RENEWABLE ENERGY sw/6/12/02

LANDSCAPE AND VISUAL ISSUES

Our preliminary report on 7 November indicated that there should be more work on on:

- Defining the visual impact of windfarms over distance to define the size of buffer zones/settings to sensitive receptors.
- Landscape capacity of different landscape character types
- Defining landscapes of value below the national designated tier.
- Defining the range of sensitive receptors that should be taken into consideration eg housing, national trails etc
- Cumulative impact

In addition the issue of wildness has been raised as a possible constraint.

We have reviewed further documents and techniques in order to address these issues.

Visual impact of Windfarms

A number of assessments of existing windfarms and advisory documents indicate the following ranges of perceived visual impact:

Windfarm/source	No. of wind turbines	High/Significant Impact distance [km]	Moderate Impact distance [km]	Slight impact distance [km]
Assessments of built windfarms CCW/CBA report [1994]				
unpublished Llangrwyryfon Llandinam Rhyd-y-Groes	20 103 24 [groups of 4,5,15]	6km 5km 2km	5-8.5km 10km 5km	
ETSU/Dulas report [1996] Cemmaes	24	Intrusive upto 4.5km	Noticeable upto 6.5km	Upto 11km windfarm significantly reduced impact

There is some degree of agreement in the range of distances where significant visual impact occurs. The variation is due to the individual characteristics of the receiving landscapes and the windfarms themselves. Llangwyryfon is located on the edge of a hill fringe and is therefore highly visible to the west. Llandinam is carefully sited on a plateau away from the adjacent valley rim and therefore views are limited to longer distances. This results in a better visual impact despite it scale. Rhyd-y-Groes is sited on a lowland undulating coastal plateau and does not

relate to a prominent landform. Combined with the fact that it is broken into several clusters and is screened by intervening elements reduces its visual impact.

Cumulative Impact

In the Cumbria guidance the issue of cumulative impact has been defined as whether a windfarm would create just a new feature in the landscape or, with other windfarms, 'lead to a fundamental change in the character of the landscape' [5.2].

Two thresholds are identified:

- When wind turbines become a significant characteristic of the landscape
- When wind turbines become the dominant characteristic of the landscape

The second is not acceptable and defines a landscape which has exceeded its capacity to absorb windfarm development. The Cumbria guidance suggests that a threshold of 20km distance between windfarms should trigger an assessment of cumulative impact. This ties in with the extent of moderate visual impact being potentially experienced looking towards two large windfarms in exposed locations. For smaller windfarms in more enclosed landscapes this distance appears excessive and should be closer to 10km. We suggest therefore an average of 15km separation distance should be act as an indicator to minimise potential for cumulative impact at a strategic level.

Guidance			
Garage	High visual impact	Preferred buffer areas/cumulative impact issues.	Slight visual impact
Wind Energy Development in Cumbria	2km windfarm visually dominant intrusive upto 5km	Upto 10km windfarm noticeable. Cumulative impact assessment needed if windfarms within 20km of each other	10-20km visible [but not significant]
CCW/CBA report [1994] recommendations unpublished		Large [windfarms place no closer than 15-20km Smaller windfarms place no closer than 6-10km.	
SNH guidance		10 km buffer around National Scenic area	

Landscape Capacity

The impact of a wind turbine development on the landscape is dependent on landscape characteristics or qualities of the receiving landscape.

The CBA report makes the following findings:

- Vertical elements [woodland, trees, hedgerows, poles] interrupt views around two of the windfarms and help screen them from view and significantly reduce their impact [particularly at Rhyd-y-Groes but also Llangwyryfon from the east].
- The scale of the landform and simplicity of the landcover at Llandinam helps to balance the large size of the windfarm. This is counterbalanced to an extent by the effect on the wildness of the landscape locally and in distant views [this is discussed elsewhere].
- The character and field pattern of the coastal plateau accommodates the Rhydy-Groes windfarm satisfactorily. This is helped by the windfarm being broken into clusters which respond to the grain of the landcover and landform.

The author of this report was also a co-author of the CBA report and viewed these windfarms.

The Cumbria guidance suggests that landscape capacity is based on the degree of visual interruption 'which is a reflection of the extent to which the [vertical] scale and density of local features in the landscape tend to limit views and create a sense of openness and enclosure' [4.6] It goes on to add that local visual dominance which limits views and generates enclosure [ie urban fringe landscapes] is a further criterion. These include not only landscapes enclosed by landcover but also landscapes characterised by multiple horizons and presence of intermediate ridges. Landscapes in this category include:

- Ridge and valley
- Rolling lowland
- Sandy knolls and ridges
- Broad valleys
- Foothills
- Rolling farmland and heath
- Intermediate land [ie land between lowland and upland]

Landscapes excluded are exposed and open landscapes and include:

- Fells
- Moorland/high plateau
- Scarps
- Coastal marsh

This logic therefore excludes windfarms on landscapes which are likely to have the greatest wind resource.

We have studied photographs and photomontages of a number of windfarms in different landscapes of the UK [from BWEA and National Wind Power websites and from reports such as CBA 1994 report] to determine our view on where windfarms are best accommodated in the landscape.

We suggest that two approaches seem to emerge for different scales of wind farm. The larger windfarms [30-120 turbines] such as at Llandinam are better placed in large scale landscapes, whether upland plateau or coastal plain. Smaller windfarms

[30 turbines and less] fit better into undulating agricultural or urban fringe landscapes with enclosure. Both of these generalisations require significant caveats relating to acceptability of local visual impact and ignore designated and other valued landscapes which would also act as constraints.

Mapping landscape capacity

The potential capacity of different types of landscapes are set out in the following tables of landscape classification derived from the LANDMAP Manual. Summarising, the following criteria apply:

Sensitivity	Larger windfarms 30-100 turbines	Small-medium windfarms 30 turbines and less
Sensitive landscapes- high constraint	Mountainous areas, upland valleys, hill and scarp slopes, lowland valleys, rolling lowland, parkland, lowland wetland, coastal zone onshore, urban areas, inland water.	Mountainous areas, scarp slopes and unwooded hills, parkland, lowland wetland, coastal zone onshore, urban areas, estuaries, inland water.
Moderately sensitive landscapes- moderate constraint	Upland moorland and grazing, mosaic upland and plateaux, unsettled high wooded valleys, levels, flat wooded lowland.	Upland moorland and grazing, settled high valleys, wooded and pasture mosaic hills, flat farmland and levels, urban edge, urban river corridor.
Landscapes sensitive in places- Low constraint	Wooded upland and plateaux	Wooded and mosaic upland plateaux, unsettled upland valleys, lowland valleys and rolling lowland, wooded land mosaic lowland, excavated and derelict land.

It should be possible to map these areas at a national scale to derive potential areas of low constraint for windfarm development. This would have to be tested through scenario and site based work. Unfortunately, LANDMAP has not been completed for the whole of Wales and this is not likely to happen until the end of 2004. This poses a problem working within the timescale have assessed other sources of mapped information on the landscape of Wales. The following alternatives have been assessed.

The Welsh Office 'Landscape Classification for Wales' 1980 covers the whole of Wales. The classification of the landscape is based on:

- Relative elevation [scale and range of vertical aspect of landform]
- Slope break [presence and extent of slope angularity]
- Field density [presence and surface mesh of fields]
- Tree density [density of isolated and small groups of trees]
- Woodland density [extent of woodland above 5 trees]

Each classification category has a range of between 6 and 9 values which were assessed through analysis of aerial photos and OS mapping and ground truthed in parts. The unit for analysis is 5kmx5km squares.

In order to assess capacity, the classification was divided into ranges which reflected potential capacity for medium sized windfarm development [upto 30 wind turbines] and then mapped.

The results were then tested against locations of windfarms and other landscapes already assessed by the author. These revealed inconsistencies including the following:

- Sensitive areas included Llanelli environs, Port Talbot area and associated uplands.
- Moderately sensitive areas included the Sugar Loaf Mountain and the South Wales valleys.
- The least sensitive areas included Llangorse Lake in the Brecon Beacons and environs, the Twyi valley, the coast around Fishguard and the scarp slope north of Cardiff.

While some of these areas may be covered by designations, others would not and the basis for use of the tool appears not robust enough to take forward.

Wildness

SNH guidance defines wild land as 'uninhabited and often relatively inaccessible countryside where the influence of human activity on the character and quality of the environment has been minimal' [2.1 p16]. It goes on to cite mountain and coastal landscapes as examples and states that some areas possess an elemental quality from which people derive psychological and spiritual benefits.

In Wales, there are clearly areas that fall into this category including designated areas such as Snowdonia and the Brecon Beacons. Our view is that the extent and character of these wild areas is less extreme than in Scotland.

One way of defining these areas is the use of the Agricultural Land Classification. Grade 5 and non- agricultural land [where it is not forest or derelict sites] defines extensive areas which appear consistent with upland and wilder areas. The main area outside designated areas is the Cambrian Mountains.

In Scotland SNH states that areas of wild land character should be safeguarded. The debate in Wales is should all wild land be protected from windfarms which would affect their silence, solitude and feeling of remoteness. If so, the Cambrian Mountains would be unacceptable. It is a matter for judgement if some remote wild areas could be temporarily sacrificed in order to avoid development of areas closer to designated or other sensitive areas.

Ymgyrch Diogelu Cymru Wledig Campaign for the Protection of Rural Wales



NATIONAL ASSEMBLY FOR WALES

ENERGY REVIEW: PART 1 RENEWABLE ENERGY

BRIEFING NOTES (December 2002 - Version 3)

Background

Planning Policy Wales (PPW) refers in Chapter 12 (Infrastructure and Services) to the fact that the Economic Development Committee (EDC) "is undertaking a review of energy in Wales. The review will explore the long-term scenarios for (non-transport) energy production"...."The targets which emerge from this review will form part of the Assembly Government's commitment to the delivery of the climate change obligations and inform future planning policy." (12.8.5)

The EDC decided to conduct its review in three parts - Part 1, Renewable Energy (RE): Part 2 Energy Efficiency; Part 3 Economic Drivers for Energy.

In the case of the Energy Review and Part I, RE, the process to be followed is not as mapped in the November Briefing Notes. Essentially, the Cabinet will not be consulted before the Draft Policy is debated at Plenary and following that debate it will up to the Minister as to the next steps. He may well announce the Policy shortly afterwards and this will be understood to have Cabinet endorsement and hence WAG Policy.

Therefore we need to amend the Procedure as follows:

- i. the EDC issues a Consultation Draft:
- ii. a report of the consultation responses is submitted to the EDC
- iii. a final draft is drawn up and agreed
- iv. this is debated at Plenary
- v. Minister considers the outcome of the debate (and may consult Cabinet Members)
- vi. agreed document is then issued as WAG policy

In respect of Part 1, Renewable Energy, we are now (December 2002) between stages iii. and iv. Stages v. and vi. are the amended ones.

This means that CPRW has now a greater opportunity to lobby the whole of the Assembly not just the Cabinet but we do not have much time.

The plenary debate is scheduled for January 21st.

Energy Review: Part 1 Renewable Energy

The EDC decided to address RE because, as (accompanying letter to the Consultation Draft

I states in the

"because of the perceived urgency associated with planning issues"

The final EDC draft was discussed at the meeting on the 14th November; reference EDC 16 -02 (p.5)

The Introduction states:

Wales has a potentially large renewable resource base and there are commercial and rural development opportunities associated with the development of several renewable technologies.

The whole thrust of the EDC's material is economic development, of course, but it pursues this so aggressively that social and environmental factors are barely considered. This is just as true for RE as it is with other subjects it addresses - in other words it deals with RE as it does with any other economic development i.e it must happen ...at any cost?

Thus the Introduction goes on to say, how, in the context of RE, is what may be termed naked economic ambition is going to be realised

In order to achieve this it is essential that the current barriers to development are addressed, in particular:

- a streamlining of the planning process;
- facilitating embedded generation;
- removing the current penalty applied to intermittent sources of electricity in the wholesale market;

providing support for the development of local niches and industries.

For the purpose of this Briefing Note we shall confine our attention to the two main areas of concern for CPRW - targets and the Planning System

Renewable Energy and Targets

There has been much discussion about targets with CPRW being involved in lobbying in March 2002 to get a range of targets put in place for consultation. Nevertheless. the EDC agreed on Nov. 14th that its preferred target would be 4TWh per annum of RE by 2010. But now it is not a 'target' we are talking about but a 'benchmark'. A benchmark conveys the impression that this is only an interim figure and the expansion will continue, whereas a target has a feeling of finality about it - a subtle but significant distinction as we think of 2020 and further along.

In its response to Recommendation 2 regarding target/benchmark the EDC states: The Committee considers that Wales should set itself a benchmark of 4 TWh which is a realistic figure for 2010 on the basis of existing plans. The Committee estimates that this would be made up of roughly equal parts on shore wind, off shore wind and other renewable sources. In the longer term, it expects on shore wind to play a decreasingly smaller part in this.

CPRW agrees that

- a) RE needs to be developed and that Wales has substantial RE resources
- b) Targets are a way of monitoring progress
- c) Targets should be expressed in actual production rather that in percentages or various capacity figures that cause confusion (for an explanation of what is TWh refer to Rural Wales (Autumn 2002) p 17

CPRW does not agree

- a) With the target/benchmark of 4TWh by 2010 CPRW has already submitted that 2TWh is achievable without excessive landscape damage (RW Autumn 2002)
- b) With the apportioning of the EDC report of a third of RE in onshore wind, third in offshore wind and a third in 'other'

Wales currently PRODUCES about 33.5TWh p.a. but CONSUMES about 16 TWh. By 2010, 4TWh would be about 20% of Wales' consumption and that seems to me more than 'doing its bit'! The case for the perceived benefits of wind energy has not been fully made - questions of how the system copes with small capacity, intermittency and the need for spinning reserve have not been answered. Fundamentally, again(!) there is too much doubt about the benefits of commercial wind energy in the context of the global issue of CO₂ emissions (see Conclusion).

On the proposed formula (one third of 4TWh of RE) Wales would have to accommodate 1.33TWh of on-shore wind power by 2010. At present (mid-December) there are 364 turbines with an installed capacity of 169.7MW. Other consents (including Cefn Croes following the recent High Court decision) take the total up to 446 turbines and 259.7MW, which would produce 0.68TWh. This leaves 0.65TWh which would require 247MW capacity. This could be 247 x 1MW machines or 124 x 2MW machines or any combination. It might need Camddwr or four proposals the size of Cefn Croes, plus a sprinkling of small but highly injurious WindWorks schemes. The permutations are endless and alarming. Such expansion of onshore wind cannot be achieved without wholesale landscape change of one kind or another and a substantial loss of amenity.

Of the 1.33 TWh also needed it is illuminating to see that the North Hoyle project (the only one yet consented) could contribute almost a quarter at 0.32TWh

Therefore, current output potential is 0.68TWh, on-shore and 0.32TWh off-shore which will give a total of 1TWh when all schemes become operational.

Renewable Energy and the Planning System

There is no doubt that certain members of the EDC and staff of the same disposition within WAG and WDA were determined that the Planning System should be manipulated to accommodate not so much RE but, of course, wind turbine development.

The planning system is defined as 'a barrier'. A developer of any industrial sector would hold similar views and the fact that we are dealing with what is claimed to be 'clean energy' may be a 'material consideration' but no more than that.

As PPW states (1.2.1.):

The planning system regulates the development and use of land in the public interest. It should reconcile the needs of development and conservation, securing economy, efficiency and amenity in the use of land, and protecting natural resources and the historic environment, thereby contributing to sustainable development.

The EDC represents a sectoral interest and does that blatantly but the Planning System exists to represent much more than that - the public interest.

There is no doubt that the overwhelming response to the Recommendation about the 'streamlining of the planning process' was one the need to maintain the basic tenets of the planning system. There was substantial backtracking on this as seen below

Recommendation 5 The National Assembly should:

- a. as a matter of urgency, seek ways to clarify and streamline the planning process for renewable energy developments;
- b. seek an extension of its powers with regard to the approval of power generation facilities;
- c. find mechanisms whereby renewables developments can provide immediate and tangible benefits to the local communities in which they are located

Committee Response:

5.13 The consultation delivered a strong message that Wales should have powers to make its own decisions and that these should be done democratically. The Committee fully agrees with both of these. It was not our intention in the original recommendation to suggest that planning requirements should be relaxed in respect of renewable energy projects or that there should be any reduction in democratic control. However, there was clear evidence of long delays in making decisions on some projects and that some were being lost as a consequence of these delays alone, not because a decision had been taken that a particular project was unsuitable or undesirable. The Committee has no desire to weaken in any way the proper democratic control of planning issues. But it is to nobody's advantage if Wales is losing investment because decisions are taking too long if it is possible to avoid this.

5.14 Subject to this clarification the Committee endorses its recommendation.

CPRW agrees with the EDC Committee's response to Recommendation 5.

It is highly encouraging that the EDC has had to make the above statement and it is Commentary something CPRW should capitalise on - whatever the EDC says, people are fully supportive of the Planning System as it is. Yes, needs to be better and less delays but essentially let us keep with the statement in PPW 1.2.1.

There will be pressure on LPAs to identify their contribution but that will have to be assessed in the context of the planning system

Conclusion

As has been said this Report is a developer's charter. After an initial reference to CO2 emissions the issue is not addressed. That is to say, the emphasis is much less towards the 'green' aspects but much more towards economic benefits. Surely, though, it is incumbent on WAG to state what savings in emissions this policy will make and to place that within the UK context.

In principle, of course, the fact that Wales can gain economic benefit from exploiting green energy is entirely laudable aim and, yes, it could be seen as a model for sustainable development but not in the way that the EDC is proposing.

As we say in Rural Wales, there are different ways of doing this. Basically, we need to think further ahead and bring in more technologies to reach the 'benchmarks'.

Members of Plaid Cymru on the EDC say that Wales should do much more than its share towards RE in the UK. They are talking about the most dispersed part of southern Britain being exploited to meet the needs of the areas with the greatest densities - has not PC been there before but from a somewhat different perspective!

This exploitation is, at the same time, threatening the economic base rural Wales. The Report is ambiguous about the effects on tourism. Before it was removed at Committee the Report said the wind turbines "could easily be accommodated away from all tourist areas". As many EDC members agreed, there is nowhere in rural Wales that could be said to be 'away from all tourist areas'.

CPRW therefore recommends the Welsh Assembly Government to

- * adopt a 2TWh target for Renewable Energy by 2010 (about 10% of Wales' consumption by then)
- * adopt a 4TWh target for 2020 that will bring in new technologies and will thus lessen the continuing pressure on the amenity of the Welsh countryside arising from wind turbine proliferation
- * support the rural tourism by acknowledging threats from over-development of wind turbines
- * confirm that the Land Use Planning System as it stands is the arbitrator for land management in the public interest
- * confirm that central to the public interest is the protection of amenity and landscapes
- * provide leadership to Local Planning Authorities in protecting amenity whilst assessing their contribution to Renewable Energy
- * remind the Assembly that the question of energy supply must always be considered in the context of demand.
- * requests WAG to include in their response the amount of CO2 that will be saved in the context of total UK emissions.

Smith, Joanne (TPE)

Jillian Hastings [jillian.hastings@arup.com] 14 November 2002 17:26 From: Sent: @care4free.net'; To: mccw.gov.uk'; 1 @westcoastenergy.co.uk'; rspb.org.uk'; @dulas.org.uk': wabritishbiogen.co.uk'; @cprw.org.uk' wwf.org.uk'; nembrokeshirecoast.org.uk' @wda.co.uk'; VISG); @angen.demon.co.uk; wirgin.net' Cc: Morgan Chris G (TPE); Smith, Joanne (TPE); 'Andy Bull'; Simon Power; @geodata.soton.ac.uk'; Facilitating Planning for Renewable Energy - criteria matrix

Subject:

Renewable Matrix 1.1 xls Dear All,

I enclose a first draft of our Renewable Energy Criteria Matrix for your review. It outlines the criteria related to each of the technologies which we consider to be viable in Wales over the next 5 years. You will see that there are presently no marine technologies included in this matrix; these are being reviewed separately and will be passed to you after comment by others.

Please return any comments to me by close of business on Friday 22nd November.

<<Renewable Matrix 1.1.xls>>

Regards, Jillian

Jillian Hastings Planner Arup Cardiff 029 2026 6460

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WIND

Significance to decision-makers in planning terms:

High = likely to be a key factor in spatial location of development; Medium = likely to be important in the spatial location of development; Low = likely to be a largely technical factor for consideration by developers

Onshore Wind

actor [1		Criteria Limits	Significance to decision-makers in planning terms		Data sets available for GIS purposes	Comments
chnical					0000	G
'ind speed A	verage wind speed at hub height	≥7 m/s	High	CCW		Concerns over the resolution of CCW wind map data.
				ETSU review of onshore wind energy resource	NAOBL dataset (DTI 1991)	
						Dulas are happy to convert NAOBL dataset into GIS format for an acknowledgement.
					Airport Authorities AEA Technology wind speed data package	
N	Max. wind speed	No upper limit likely in the UK	Low	ETSU review of onshore wind energy resource BWEA	Meteorological office Airport Authorities AEA	Dulas are happy to convert NAOBL dataset into GIS format for an acknowledgement.
		Data of a distinguished	Low	ETSU	Technology wind speed data	
Vind directional Fariation		Rate of variation not to exceed yaw response capability	Low	BWEA		
	mpact of directional variation on urbine layout		Low			
		Turbulence not to be so great as to cause unacceptable fatigue	Low			
Fround conditions	Firmness of ground	Avoid sand/marsh/etc	Low			
Grid connectivity	Distance to national grid	Dependent on wind farm size (e.g. 10km)	Med / High	SEL report Electricity Association		May pay for local distribution
				Dist Net Op Crown Estates WindBase		
	Spare capacity of nearest national grid section	>10 MW spare capacity	High	National Grid Company	Continually changing	
nstallation	Length of new road required to be built		Med	Highway Authority?	OS base maps	
	Capacity of existing road network to accommodate construction traffic	Quality of roads to be used Width of roads to be used No height restrictions (e.g. bridges)	Low (a matter for the developer, not the planners)	Highway Authority?		
monitoring	Distance from service centre	Must be within economic distance	Low			
Environmental Effect on birds	Presence of designated bird site	Special protection area – Ramsar site	High	CCW RSPB	CCW designated areas maps	
	Location in relation to bird migration routes	Turbines to be situated away from bird migration routes	High / mcd	CCW RSPB		
Impact on nature conservation	Presence of designated nature conservation site	Nothing – SSSI – cSAC	High	CCW, Local planning authorities, et al	CCW designated areas map	
Visual impact	Proximity to nearest existing (visible?) wind turbines	Dulas/ETSU (1995): Under 5km is 'dominant'; 6-7km is noticeable; 7-10km may be noticeable; over 10km impact is 'significantly reduced'	High	CCW	CCW/Macaulay wind maps	
	Proximity to nearest public highways	100m	Med / high	ccw	CCW/Macaulay wind maps	
Wayleaves	Proximity to nearest public footpaths Existing services/land use/roads	Acceptable crossing of existing	Med / low	CCW	CCW/Macaulay wind maps	
ayıcarca	and the state of t	services/land use/roads				
Social	Nicia	T	Med		T	
Amenity impacts	Visual	-	High	ccw	LANDMAP	Does not yet cover the wh of Wales
Impact on telecommunications	Level of interference with civil electromagnetic communication	Must be avoidance of significant upgrade/modification of civil telecommunication systems	Med	Telecomms. companies		
Creation of employment	Manufacture of turbines	No limit	Low / med			These factors are unlikely make a material difference the siting of schemes
Stimulation of local industry	Operation of turbines	No limit	Low / med			Unlikely to make a materi difference

nilitary radar systems	their spheres of influence			CAA / BWEA report		Aviation report (Oct 2002)
Impact on civil &	Proximity to flight paths	0 - 40km	High	MoD		
military flying zones				CAA / BWEA report		
	Frequency of flight path use	?	High	MoD		
				CAA / BWEA report		
	Clear 'flying height' required	Oft (helicopters) - 2000ft	High	MoD		
				CAA / BWEA report		
Impact on meteorological data collection	Proximity to met office data collection stations	0 30km	High	Met office	IT	
Economic					L	
Funding	Capital grants ROCs CCL exemption		N/A			
Contribution to intermittency penalties under NETA	Projected penalties	Balance against revenue to allow profit from generation	N/A			
Cost of generation	Cost of unit electricity generated		N/A			

Smith, Joanne (TPE)

Jillian Hastings [jillian.hastings@arup.com] From: 14 November 2002 09:43 Sent: ന്നccw.gov.uk';, @care4free.net'; To: @westcoastenergy co.uk' @rspb.org.uk'; mdulas.org.uk'; @cprw.org.uk @pembrokeshirecoast.org.uk, . @wwf.org.uk'; wda.co.uk'; Morgan, Chris G (TPE); Smith, Joanne (TPE); 'Andy Bull': Simon Power Cc: eodata.soton.ac.uk Facilitating Planning for Renewable Energy - Minutes of 8th November Subject: Facilitating Planning for 0002Minutes 08-11-02 WAG revie... rene. Dear All,

I enclose the presentation and the minutes from last Friday's TAG/Steering Panel meeting at Theatr Hafrn, Newtown. The renewable technology matrices discussed at the meeting will be issued very shortly.

Please return amendments and other comments on any of these items by Friday 22nd November.

<<Facilitating Planning for renewable Energy2ndmtg.ppt>> <<0002Minutes 08-11-02 WAG reviewed.doc>>

Regards, Jillian

Jillian Hastings Planner Arup Cardiff 029 2026 6460

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Job title	Facilitating Planning for Renewable Energy	Job number 112223-00
Meeting name & number	Technical Advice Group / Steering Panel Meeting 2	File reference 9.11
Location	Theatr Hafren, Newtown, Powys	Time & date 11am 08 November 2002
Purpose of meeting	To discuss progress	
Present	Andy Bull - WAG - WDA - CPRW - Aberystwyth Uni	- BWEA - WWF Cymru - Forestry Commission - GeoData Institute (Arup) t Blackstone - Arup Energy
Apologies	- RSPB - WLGA CCW - ISG	West Coast Energy - Dulas
Circulation	Those present British Biogen - WLGA - White Consultants	FOE Cymru EMU Ltd

Prepared by

Jillian Hastings

Date of circulation

11 November 2002

Date of next meeting

10 January 2003

Job number Date of Meeting Action Job title 112223-00 08 November 2002 Facilitating Planning for Renewable Energy

1. **Apologies**

Apologies were received from



On behalf of the Welsh Assembly Government, Chris Morgan expressed concern/disappointment at the lack of response from other members of the steering panel. In particular, from representatives of the Welsh Local Government Association, who have a very important role in relating this project to the work of professional planners.

Matters arising 2.

Arup confirmed that Sustainable Energy Limited are no longer part of the project team, following concerns raised around the time of the last steering panel meeting about conflicts of interest.

Minutes of the last meeting 3.

Several member of the panel had not seen these in final form - Arup to send

Arup

Comments from the panel -

Re: conflict between forestry and SRC

The Forestry Commission acknowledged that this relates to the use of Shotton paper mill. The FC has recently renewed its contract with the mill to supply forestry products to 2008, and the Woodland Grants Scheme will include some grants for SRC. The FC is not opposed to SRC, and has now provided Arup with its position statement.

Re: marine renewables

WWF Cymru has commissioned a report (via Cardiff University) on marine renewables, a joint programme between WWF and the Wildlife Trust. The report on the Welsh potential for marine renewables is due out w/c 11th November 02. WWF Cymru will circulate copies to the Steering Panel when available.

WWF Cymru

Re: perception that 'Wales is closed for business'

The WDA reiterated the point that the Welsh RE sector needs to be promoted more strongly, and that the planning system is a sticking point for would-be developers. There is still a perception that "everything that goes to planning in Wales ends up in a Public Inquiry".

Areas of search for renewable energy 4.

this is not a new idea: was tried in Dyfed (Ceredigion) and Powys some time ago. AB not so sure about Powys. Once areas were identified, there were strong protests at the allocations. The idea went into the Dyfed Structure Plan (sic).

the idea would be useful to try again

the BWEA, Scottish Natural Heritage and others are opposed to the areas of search idea. It is yet to be tested in practice by the planning system, and is dependant upon the criteria used to choose the boundaries. It also assumes in

Job title Facilita	Job number Date of Meeting ting Planning for Renewable Energy 112223-00 08 November 2002	Action
	favour of rejecting proposals for sites beyond the boundaries. The Castle Morpeth Local Plan (presented by Arup as an example) has yet to be tested in practice.	
	recently commented on a new policy for RE in Aberdeenshire, which employs a four-tier approach, judged by level of designation, with no absolute presumption against RE development anywhere. We shouldn't exclude areas outside the formal 'areas of search': instead, presume against development in the highest landscape value areas, and in favour in the lowest.	Arup to consider
5.	opposed to this approach, as it means 'allocating a policy level of constraint on subjective assessment of landscape characteristics'. The approach was tested in Scotland and put to one side after it was found that there are already wind farms located in areas which were judged by the approach to be unsuitable for such developments. Perception that statutory consultees on landscape matters are often at odds with local authorities.	
	indicated Arup were considering landscape character areas as a base unit onto which other data would be mapped, rather than using the landscape character area per se as the only driver for the policy decision. the advisory bodies have an advisory role; decisions are then made by a	
	democratic institution.)	
6.	Ministry of Defence MoD interests are a variable constraint, should not be a reason to totally exclude an area from consideration. The MoD constraint should be added to the Arup tool.	Arup
	the MoD is now aware that it can't sterilise large blocks of land in the same way as previously, and will have to justify its objections to RE development in more detail in future.	
7.	Detailed criteria for development of onshore RE schemes: matrix Arup has obtained and developed datasets for different technologies, but the scale and quality of these varies significantly.	
	The Steering Panel are requested to study the Arup matrix of criteria and comment before 22 nd November. It is hoped to run a focus group of planners (via Andy Bull) to consult on the fourth column, 'significance in planning terms'.	All Arup
	Biomass Lis content for Arup to use the data it has on biomass resources, subject to confidentiality constraints.	
	Grid issues with regard to the data used in the previous SEL report, the Swalec grid information is not complete. WDA has National Grid 10-year Plan, Manweb information and contact details for Manweb and an ex-Swalec consultant. Arup to contact to obtain details.	Arup
		©Arı

Job title Facilita	ating Planning for Renewable Energy	Job number 112223-00	Date of Meeting 08 November 2002	Action
	NAOBL wind model this information is not particular which is downloadable from BWEA accurate than wind: at a better resolu	if required. The for	ry old: a DOS program estry data is more	
8.	Strategic criteria for RE developme	ent: onshore & off	shore wind, biomass	
	Lists of strategic-level criteria were these tables along with the PowerPo	presented to the par int presentation for	nel. Arup to circulate comment by 22 nd	Arup
	November. 'Hydro should also be addressed then by criteria-based analyis.	by the Arup study,	if not through the GIS	Arup
	offshore marine schemes (other the next 5-10 years. Biomass is more technologies and supply scenarios of Arup study and delivered in UDP poserious addition to wind as part of the Should also consider interactions be offshore wind could constitute a largassist small coastal councils to see h	e a case of 'moving nange, but must be plicy, if biomass is to be renewable mix. tween on and offshore ge proportion of the	goalposts' as fully addressed in the o be presented as a ore environments: Welsh target; need to	Arup
	There are 5 different 'residues' v The English approach to biomass hadifferent.			
	National Parks should be added the chief exec of Pere 'not against RE' in the park.	ed to the offshore cr nbrokeshire Coast I	iteria list. NP, has stated that he is	Arup Arup
	Arup will use WindBase informatio Aggregates data in the GIS which is CM: the Bristol Channel informatio coastline could be mapped to suffic	developed. In is almost comple	te; the rest of the Welsh	
9.	Landscape and conservation issu	ies		
	biomass presents a greater thr turbines don't affect the reason for Landscape is a different matter: Wa LANDMAP is very fragmented. Th exists.	SSSI designation, w les has a very valua	why not put them there?' Able landscape and	,
	the question should not be 'in of for/against?'	or out?' but 'how st	rong is presumption	
	hydro may have more significa	ant impacts on SSSI	ſ.	WAG/CM
	CM: there was an overview of land c. 1994. Will find and copy to Arup		ons in Wales, produced	WAG/CM

Job title Facilitat	ing Planning for Renewable Energy	Job number 112223-00	Date of Meeting 08 November 2002	Action
10.	Other potential layers for the GIS	, 6) z		
	Special Landscape Areas? must be designate them 'on a whim'	e fully justified; Co	incils no longer able to	Arup
	Historic Landscape Areas? – non-sta from wind turbines etc. Arup to con Green wedge? – analogous to green wedges are specific policy designati	isider belts, in Wales: gre	en belts and green	Arup
	relate to the quality of the landscape All designations from Structure Plan	 ns? – it was agreed	that these should be	Arup
	included at this stage, and could late unworkable. designations should all go in, by presumption which we all agree on. been through the planning process; to task'; Historic Landscape Areas a policy document. we need to codify the level of r CM: MoD considerations should be dissatisfaction with pre outside of the designated zones; Mo for opinion.	ut could be at differ SLAs are publicly a LANDMAP is subjected by an until the country of the co	ent levels of accountable, as have ective and never 'taken elected body creating a ach data layer. of weight' also. ow flying takes place	
	Visual & cumulative impact? Arup does not consider that these sl planning tool: areas of search shoul impact and other issues considered	d be allocated at thi	is level, and visual	
	developments on the boundar according to legislation. in policy terms though, 'a bour			WAG
	what about buffer zones? CM: visual impact / cumulative im consider. Arup output at this stage sensitive areas, or may draw the iss JS: WAG holds information on the impact of 3 recent windfarm propo Nant Carfan (Montgomeryshire).	may not include sol sue to the attention of Inspector's conside	lid lines at the edges of of local authorities. eration of the cumulative	
	Coniferous woodland? — several National Parks are voc planting as well as wind developm woodland should not be a constrain	ents. But the presen	nce of coniferous	
11.	Scope of Arup planning tool			
	Biomass potential - electricity The FC has recently undertaked	en an exercise to ma	p timber transport routes	

Job title Facilitatir	ng Planning for Renewable Energy	Job number 112223-00	Date of Meeting 08 November 2002	Action
	at an all-Wales level. A four-year protential in Wales. Co-products from pledge) are likely to be the founding here. Onus on developers to look for FC 'knows where roundwood coppine network on a map base. There are the Wales: i) fencing ii) chipboard (Chronespan?) iii) Shotton (biomass fuel) The FC has a new £6.5m capital gramedium generation schemes in Walthe FC Strategy document to AB/SJ Planting willow and poplar requires subject to EIA. BB: there is greater potential for elewest Wales than elsewhere, likely to these required prior allocation in UI Biomass for CHP AB: TAN8 will mention heat; we now where plant would go.	m sawmills, and smarger fuels for electricity reco-products and indice is' and have over tree markets for smarrer funding package es (70kW to 2MW). P. Currently confidence of the property of	aimed at small- handed a copy of ential. uch proposals are piomass in south and ects.	
	targets for Wales are 4TWh for	r electricity; 1TWh f	For heat.	
12.	Next meeting The next Steering Panel Meeting is acknowledged that the key principle after this meeting so all TAG membattendance.	es behind the TAN r	nust be decided shortly	All
	The Arup team will bring the follow i) maps of the resources, show nature conservation designs include a couple of maps w National Parks (and AONE ii) an example of the GIS tool demonstrate the principles	wing what happens i ations are weighted with 10km and 20km as?), for illustrative p , using the data we h of using datasets an	f different landscape / differently. This will buffer zones around purposes. have so far to d how they may be	Arup Arup/ GeoData
	manipulated: the 'sliding b It is intended that at this meeting, t design process, not presented with	he Steering Panel w	ill be engaged in the	

Smith, Joanne (ESH - Planning)

From: Simon Power [simon-j.power@arup.com]

Sent: 07 November 2002 10:00

To:

@forestry.gsi.gov.uk'; @forestry.gsi.gov.uk' @ccw.gov.uk'; gcare4free.net'; \ @westcoastenergy.co.uk'; @rspb.org.uk'; britishbiogen.co.uk'; § zcprw.org.uk'; @dulas.org.uk

vwf.org.uk'; @pembrokeshirecoast.org.uk'

wda.co.uk'; (ISG); 'Andy Bull'; Smith, Joanne (IPE); Morgan, Chris G (IPE); Scott, Linua (I'lanning)

Cc: Villian Hastings; \

Welsh Renewables Research/TAN 8 mtg- Agenda and Briefing note Subject:

Attachments: 0003Tech note on Renewables Brief.doc; 0002Agenda for TAG 2.doc

Dear All

Apologies for the late issue. I enclose an Agenda for tomorrows meeting, together with a short paper which raises a number of points regarding our interpretation of the Welsh Assembly Government's Brief and our suggested way forward, following our work to date. This will form the basis for our technical presentation and also the discussion/questions session which follows.

I look forward to seeing you all again tomorrow. Directions follow after my address again in case anyone did not get the previous email.

<<0003Tech note on Renewables Brief.doc>> <<0002Agenda for TAG 2.doc>>

Regards

Simon

Simon Power

Associate (Environment and Planning)

Arup

4 Pierhead Street, Capital Waterside, Cardiff CF10 4QP

Tel: +44 (0)29 2026 6593 Fax: +44 (0)29 2047 2277 simon-j.power@arup.com

www.arup.com

date: Friday 8th November 2002

time: 11am - c.3pm (hot buffet lunch provided)

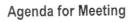
venue: Theatr Hafren, Llanidloes Road, Newtown, Powys SY16 4HU, tel 01686 625447. Llanidloes Road is the main road west out of Newtown, and is also known as the A489.

The Theatre is approximately a mile from the town centre, on your right hand side as you drive west.

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Page 1 of 1

Job title		Welsh Renewables Research	Job number 112223	
Meeting name & number		2nd Steering Panel Meeting 2/02	File reference 9.11	
Location		Theatre Hafren, Newtown	Time & date 11.00	8 November 2002
Purpose of m	eeting	To discuss progress		
Attendance		TAG Steering Panel		
Circulation		Those attending		
		All		
2.1	Introduction	ns		
2.2	Apologies			
2.3	Matters arising from previous meeting			
2.4	Presentation	on by Arup on work undertaken to date and	l issues arising	
2.5	Structured	Discussion (based around briefing sheet))	
2.6	AOB			

Prepared by

Simon Power

Date

7 November 2002



BRIEFING NOTE FOR 2nd MEETING OF CONTRACT 105/2002 – Facilitating Planning for Renewable Energy to be held on the 8/11/02.

The text that follows presents the Arup understanding of the brief/problem to be addressed and discusses thoughts and progress to date. The sections in italics reproduce the objectives/aims of the research contract, as set out within the Welsh Assembly Government Specification, in the order in which they arise.

"The Welsh Assembly Government require that this project will review available information, techniques, research and projects and from it develop a decision support tool for Technical Advice Note 8 (Renewable Energy) to assist local planning authorities in providing for renewable energy"

We have been reviewing information and techniques widely, and will be citing examples from England, Scotland and the Netherlands. Some of the English Regions and Scotland are further advanced than the Welsh Assembly Government (WAG), particularly in the preparation of regional planning guidance and more up to date renewables planning guidance. There is a vast literature database available in which onshore wind issues dominate, however much of the work looking at information needs for planners has tended to deal with development control officers and individual planning applications. Information on the emerging technologies is less comprehensive. We have reviewed the existing policies for renewable energy constrained within the emerging Welsh UDP's and at present they are inconsistent and not spatially specific.

Various bodies are in the process of developing similar approaches to that proposed by WAG, some of which include a GIS component (eg. Scottish Natural Heritage/Crown Estates).

Studies reviewed and consultations to date have indicated that the regional and sub-regional (i.e Unitary Development Plan level) apportionment of national renewables targets is a key stage in the facilitation of planning for renewables, but this issue is beyond this current project. The issue of 'scenario-based' modeling of regional renewables targets verses the 'available' unconstrained resource is also seen as a key issue to test the appropriateness of proposed 'top-down' apportionments of targets. Such work has been recently been undertaken for Scotland and some of the UK regions. It would seem the inevitable next stage to following this study. Linked to such work might be the need to establish technical and political groupings of authorities to provide a forum for the discussion of the sub-regional renewables targets (eg. Similar to the regional waste groups or regional aggregate working parties). Our work could feed into discussions held at such gatherings.

"identifying the criteria relevant to the siting of all viable forms of renewable energy in the on and offshore environment, either in an integrated way or separately. These will include technical and environmental constraints as well as economic and social issues associated with each technology. It is recognised that these will differ for each technology and that the development of technical and environmental constraints should include the ability to include grid issues and cumulative effects"

We have interpreted "all viable forms" as being those which are likely to give rise to realistic planning pressure within the next 5 years, and/or those which are likely to require specific land allocation requirements within the current round of Unitary Development Plans. Only onshore wind is felt to give rise to significant Local Authority "planning pressure" that could be solved by the UDP land allocation process. Several of the offshore wind, tidal and wave issues may however give rise to strategic planning issues that are likely to be of concern to the Welsh Assembly Government and statutory consultees.

Biomass and other technologies/resources we feel should be possible of being dealt with via criteriabased planning advice and the existing planning system for industrial developments. To aid this process we propose to provide criteria and data that can feed into the TAN update process, but not to undertake specific spatial mapping. "Economic and social issues" we see as falling outside the current project, these being important issues but which are not capable of being/not appropriate to dealt with in a strategic spatial mapping tool.

We consider that onshore and offshore have to be dealt with separately via two approaches, which could be linked to separate guidance i.e. the onshore maps (derived from the GIS) linked to TAN8 and of primarily use to Planners, and offshore maps (maybe GIS derived) linked to a (as yet unwritten) Marine TAN8 and of primarily use to the Welsh Assembly, statutory consultees and industry.

6 November 2002



"reviewing these criteria in terms of their relative significance with reference to available resource and estimated contribution, the current context for renewable energy, and the nature and form which the proposed planning tool with take"

We have interpreted this as :-

onshore - principally landtake, landscape, visual, displacement of other land uses, grid issues and MOD influences

Offshore – principally those contained within the Crown Estates WindBase model. Many of the constraints are common to several technologies.

Criteria for the strategic sieving of constraints for onshore wind have been developed for other UK regions and also recently by the MOD and these will be built upon for this study. One major area for discussion is the extent to which existing National Landscape and Ecological designations can be used as an 'elimination sieve' for potential development areas. Whilst it is recognised that for many designated areas (particularly nature conservation), wind developments are not necessarily incompatible with the nature conservation interests, it is difficult to pick-up such site specific issues in a strategic tool.

"Peer review of the use of similar planning tools and/or GIS techniques"

We have been considering principally landscape characterisation techniques from the UK Regions, including LANDMAP, Countryside Character areas/ the CCW Macaulay work for onshore wind. For offshore issues we are considering the Marine Aggregate GIS databases/Crown Estates work. Capacity concepts, cumulative impact assessment and visual assessments are being explored. Different approaches have been taken by individual UK regions (eg. Cumbria CC) and the best will form the starting point for our work. The lack of a completed consistent strategic landscape characterisation of Wales at present will be a problem.

"creation of a planning tool based upon the agreed criteria using an appropriate PC based programme suitable for local planning authorities to operate without copyright restrictions and with a minimum of requirements for additional bought-in data. This is likely to involve a hypothetical trial of the tool and the result will enable a clear methodology for the assessment of renewable energy potential for each technology which is clearly understood and acceptable to all parties involved in the land use planning process."

We are considering principally an onshore tool that would be used by forward planners/strategic planners in the preparation of Unitary Development Plans. It would therefore need to provide environmental and technical constraint data in a form which can be used in the UDP allocation process (typically 1:10000/1:25000 scale). It is likely in the first instance to be a set of 2 constraints maps (technical/Environmental) linked to a series of guidance flow charts, but derived from a GIS developed for the project. The same data could produce maps at (say) 1:100000 scale which could be used by the Welsh Assembly Government in the process of reviewing the potential future regional allocations of the national renewable target. The principal unit of the mapping is likely to be landscape areas. Ceredigion and Powys UA's are being considered as case study areas.

One early issue we have identified which may be of wider political concern is that by definition, the area allocated for wind energy developments in UDP's may be greater than will actually be taken up by developers. In some authorities the 'unconstrained' resource may be considerable. The identification of such areas of search in UDP's may lead to unfounded public concern over the extent of future wind development, but it may be essential to provide developer flexibility and to accommodate renewable energy developments beyond the current national targets.

In the offshore environment we are considering principally an offshore tool that builds upon the Crown Estates work and the Bristol Channel Marine Aggregates Decision Support System and looks at technical and environmental constraints related to sediment environments. The Bristol Channel is being considered as a case study area because of the availability of existing information and the likelihood of future offshore renewable development in this area.

Smith, Joanne (ESH - Planning)

From:

Morgan, Chris G (TPE)

Sent:

17 October 2002 11:46

To:

'Simon Power'

Cc:

'Andy Bull'; Smith, Joanne (TPE)

Subject: RE: Welsh Renewables Planning Study - Offshore issues

Simon, Jo,

Much to ponder and little time to do it in today. Can only suggest we discuss the implications at our meeting on 5 November. In the meantime, perhaps Jo would contact CE regarding the data issues, and Simon could cost out the "mini project" idea.

Thanks.

Chris

Head of Branch 4* Planning Division Welsh Assembly Government Cathays Park Cardiff CF10 3NQ

Direct line: 029 2082 3725 Fax: 029 2082 5622

E-mail: christopher.g.morgan@wales.gsi.gov.uk

Any of the statements or comments made above should be regarded as personal and not necessarily those of the Welsh Assembly Government, the National Assembly for Wales, any constituent part or associated body.

----Original Message----

From: Simon Power [mailto:simon-j.power@arup.com]

Sent: 16 October 2002 16:31 To: Smith, Joanne (TPE)

Cc: 'Andy Bull'; Morgan, Chris G (TPE)

Subject: RE: Welsh Renewables Planning Study - Offshore issues

Dear Joanne

Welsh Renewables Study - Offshore issues

I have been in touch with Crown Estates regarding their WindBase offshore renewables GIS. I enclose some Crown Estates. It seems that the system that they are developing forms a very information from ₹ good basis for your purposes, subject to the following points :-

-Ownership of the data

-Accessibility to the GIS and the data - will NAW be allowed to simply copy the GIS and all of the data across?

-Relevance of the opportunities and the constraints to NAW in terms of planning aims for offshore - offshore opportunities seem limited around the welsh coast based on the Crown estate analysis.

-Accuracy of the data on the smaller Welsh scale.

^{*} The Branch produces policy and technical advice, and undertakes research in Wales on the land-use and environmental planning aspects of: Minerals (energy and non-energy); Marine Aggregates Dredging; Waste; Contaminated Land; Unstable Land; Flood-Risk and Development; the Coast; Renewable Energy (on- and off-shore); Climate Change; Land Reclamation; Noise, and; Applied Geology. It is also responsible for scientific surveys monitoring coastal change, and administers the Sustainability Fund in Wales set up from Aggregates Levy monies.

- -Other offshore technologies if this covers offshore wind in reasonable detail, do NAW wish to address e.g. marine current turbines, barrages etc?
- -Health warnings the limitations are stated on the ppt slide enclosed- are these acceptable to the NAW? Can we do better?
- -Landscape/seascape issues I do not think these are included and would certainly be highly relevant in some areas e.g. inner Bristol Channel/Severn estuary.

What I think is useful is that it seems, based on the data sources listed, that the CE database does include the CCW and other Wales specific data (not sure about the Bristol Channel (aggregates data)) so that at the very least it does represent a good starting point for a Welsh specific tool.

How to proceed?

- -I would suggest that we propose the CE database as our starting point, on the proviso that the NAW negotiate access to the GIS/data for our use. If the CE database is not available then the team has little enthusiasm for reinventing something that has clearly been subject to a significant amount of work and will been seen by others as the definitive data source.
- -We could then undertake a review of the criteria for opportunities/constraints and come up with a Welsh-specific approach this may highlight new criteria, remove or downgrade some in the CE database etc. This should include a review of how landscape/seascape issues could be incorporated (although we would need to specify more carefully what we commit to in this respect).
- -We could review the Bristol Channel aggregates database to see if this is useful and could be incorporated (e.g. it may be that aggregates resources are more important in the BC than potential wind farm sites).
- -We could investigate with ne possibility of bringing in the weighting idea for the offshore. We think this could the key to making use of the CE GIS in a welsh specific way since it would allow the NAW to be flexible in its identification of opportunities/constraints in a more future-proof way. CE acknowledge that Windbase is only potentially a decision support tool
- -Finally, we could consider what might be needed to include other offshore technologies (if CE are not already considering this). is quite keen on this since he is certain that some of these technologies will start to be relevant off Wales within 5 years particularly current turbines. This could be as simple as adding a few extra layers to the CE GIS and re-running the analysis of opportunities/constraints perhaps with the weightings changed from those applicable to offshore wind, but I suspect it might be more complex given the sort of data we might be dealing with.

Steve and I feel that if we go down the route of the above, then a separate mini offshore steering panel would be needed, with CCW marine conservation officers, Crown Estates/DTI representation, someone from the Marine dredging industry etc. and selected individuals from the current TAG to provide specific offshore guidance. It is in effect a separate mini-project which acts a scoping for a larger exercise which might or might not lead to a new offshore GIS and offshore WAG planning guidance. We are trying to work out the implications of the above in terms of the current contract, but it is very much an iterative process with yourselves.

y and I feel that to complete the above might involve and additional 5-10% to the current contract (say an extra 10 days or so of a time plus some input from me).

I suggest we discuss further!	
Regards Simon	
Simon Power Associate (Environment and Planning)	

Arup

4 Pierhead Street, Capital Waterside, Cardiff CF10 4QP

Tel: +44 (0)29 2026 6593 Fax: +44 (0)29 2047 2277 simon-j.power@arup.com www.arup.com

----Original Message----

From: Smith, Joanne (TPE) [mailto:Joanne.Smith@wales.gsi.gov.uk]

Sent: 10 October 2002 16:17

To: 'Simon Power'

Cc: 'Andy Bull'; Morgan, Chris G (TPE) Subject: RE: Welsh Renewables Planning Study

Simon

Thanks. Of your two options we have to go with the latter. The Minister has just informed us that she is concerned about the offshore side of things and therefore we need to address. However, I entirely take your point about the difficulties this presents, particularly in terms of the end users and decision makers.

Therefore, I advise that you do seperate the issues and focus on the onshore environment for the purposes of TAN 8 as per your understanding of the brief. For the offshore element I think it would be ok at this stage to do a feasibility type study ie look at the data out there (eg Bristol channel), the work being done by Crown Estates (eg windbase) and CCw (eg seascape) and outline what is required to be done to address the offshore wind issue in the same way as we've done the aggregates, ie what the elements of a potential tool would be and how this could perhaps work to assist a more strategic consideration of offshore wind in the future. At this stage we don't envisage a large data collection exercise for the seas around Wales.

I hope this makes sense but please give me call if you need clarification. Please let me know if there are any implications in respect of your tender.

Thanks for the PAN, although I do have a copy. Yes, it doesn't cover offshore technologies, but funnily enough NPPG does mention them, albeit at the same time making the point that the Planning locus only extends to mean low water.

regards Jo

----Original Message----

From: Simon Power [mailto:simon-j.power@arup.com]

Sent: 10 October 2002 12:17 To: Smith, Joanne (TPE)

Cc: 'Andy Bull'

Subject: Welsh Renewables Planning Study

Dear Joanne

re: Offshore Renewables

At present we are holding fire on tackling the offshore renewables in terms of the planning study. In view of the potential differing requirements of WAG/WDA, the lack of direction from the Steering Panel, and the work undertaken to date by Crown Estates, we would find it helpful if you, Andy, Chris and ISG/WDA could please clarify our brief in this respect.

There are several options as a way forward, and one could be that we remove the offshore environment from the brief, and devote more time to dealing with the WDA's onshore aspirations. In the event that a consideration of the offshore environment is to stay in the brief, then a clarification (as a modification to the brief) indicating that you are interested in a specific offshore strategic planning tool for largely WAG-only use would be very helpful (if only to avoid critisism from the Panel as to why we are devoting resources to the exercise).

The more we get into the study the more difficult it is to see at this stage how the two aspects of the study could be combined into one decision support tool, given the different potential user groups, decision makers, datasets, legislative requirements etc. For example - if the 'tool' is to underpin TAN 8 - TAN 8 presumably will only deal with the onshore environment? Would we, if we were to consider offshore, be effectively looking at a tool to guide a yet unwritten Marine TAN 8 - as per aggregates?

I'm sure you've seen it, but I enclose the Scottish PAN 45 (Renewable Energy Technologies), which excludes the marine environment. Perhaps we should meet briefly to discuss this issue?

<<pan45.pdf>>

Regards Simon

Simon Power
Associate (Environment and Planning)

Associate (Environment and Planning)

Arup 4 Pierhead Street, Capital Waterside, Cardiff CF10 4QP Tel: +44 (0)29 2026 6593 Fax: +44 (0)29 2047 2277 simon-j.power@arup.com www.arup.com

PLEASE NOTE: THE ABOVE MESSAGE WAS RECEIVED FROM THE INTERNET.

Smith, Joanne (ESH - Planning)

From: Jillian Hastings [jillian.hastings@arup.com] 09 October 2002 09:49 Sent: To: Dccw.gov.uk'; @care4free.net'; ! @westcoastenergy.co.uk'; @rspb.org.uk @britishbiogen.co.uk; ₱ @cprw.org.uk; pembrokeshirecoast.org.uk; '-9 dulas.org.uk; @wwf.org.uk; @bridgend.gov.uk"; menvironment-agency.gov.uk"; crs99@aber.ac.uk"; @wda.co.uk; Cc: Smith, Joanne (TPE); Morgan, Chris Simon Power G (TPE); 'Andy Bull';

Subject:

Facilitating Planning for Renewable Energy

Attachments: Minutes 27-09-02 reviewed.doc

Dear All,

I enclose minutes of the Steering Panel Meeting at Welshpool on 27th September 2002, where Arup presented their proposals for this project. Any comments from the Steering Panel / Technical Advisory Group welcome.

<<Minutes 27-09-02 reviewed.doc>>

Please note that the date of the next meeting is Friday 8th November. Further details will be circulated nearer the time.

Yours sincerely, Jillian Hastings

Jillian Hastings Planner Arup Cardiff 029 2026 6460

PLEASE NOTE: THE ABOVE MESSAGE WAS RECEIVED FROM THE INTERNET.

On entering the GSI, this email was scanned for viruses by the Government Secure Intranet (GSI) virus scanning service supplied exclusively by Cable & Wireless in partnership with MessageLabs.

GSI users see http://www.gsi.gov.uk/main/new2002notices.htm for further details. In case of problems, please call your organisational IT helpdesk.



Job title	Facilitating Planning for Renewable Energy	Job number 112223-00
Meeting name & number	Steering Panel Meeting 1 (Technical Advisory Group Meeting)	File reference 9.40 (i)
Location	Welshpool	Time & date 27 September 2002
Purpose of meeting	To present and discuss proposals for the Facilitating Planning for Renewable Energy project	
Present	RSPB CCW - EA - West Coast Energy h - BWEA - ISG Joanne Smith - WAG Chris Morgan - WAG Andy Bull - Powys / WAG - WDA - Friends of the Earth Cymru - Dulas - Aberystwyth University - WWF Cymru - CPRW	
	Simon Power - Arup Jillian Hastings - Arup - Sustainable Energy - White Consultants	
Apologies	- Council for National Parks - WLGA / Pembrokeshire CC - WLGA / Bridgend CBC	; ;
Circulation	All of the above, plus	. *
	- British Biogen GeoData Institute - EMU Ltd Rupert Blackstone - Arup Energy	

Prepared by

Jillian Hastings / Simon Power

Date of circulation

October 2002

Date of next meeting

8 November 2002, at Broneirion Guide Centre, Llandinam, Powys

Job title	Job number	Date of Meeting	Action
Facilitating Planning for Renewable Energy	112223-00	27 September 2002	

1. Apologies

TAN 8 review timetable

In response to a question from CCW, WAG confirmed that the next revision after that currently underway will be in 4-5 years. Therefore, the scope of the present exercise should be limited to the technologies which are likely to come on-stream during that time frame.

BWEA suggested that the Arup report has a 'time limit' in terms of its future applicability, and that this should be made explicit in the report.

Purpose of the planning tool

CPRW queried Arup's description of the project as something which 'reduces uncertainty in the planning system' — doesn't believe that our tool should be about introducing *certainty*, as this would bypass the planning system as it stands.

WDA warned against the project moving into the realms of conjecture. WDA outlined a view of the project which covered the following areas: what there is in terms of resources, what the potential of those resources is, where they are and what the constraints are on their future development. Strongly supportive of the CCW tool and envisaging that the Arup work would build on CCW progress.

this should be a *tool*, not a resource spatial map; some consensus on the contentious issues should be reached among the Technical Advisory Group during the tool development process: can't leave it all for the planners to resolve later.

Dulas – the weighting aspect of the tool is crucial in taking some of the confrontation out of the planning system.

BWEA – different levels of [landscape] designation could be weighted differently. The planning tool should not make value judgements. The tool should be as objective as possible, but 'tweakable' by others.

CCW – weighting is the key issue. Sliding bars would be good, but we can't sit decision-makers down in front of the sliders at a national scale; it's up to this tool to do some sliding before this and present the results to the TAG.

WDA pointed to subjectivity of the sliding bars idea; constraint decisions are political. Our assessment of locations in terms of technological appropriateness would be conjecture only. Arup should focus on the resources available for different technologies, not the technologies themselves: being too prescriptive about what is technologically possible within a given timeframe will make the tool less 'future-proof'.

CPRW - what about taking a sequential approach?

Scope of the planning tool – technologies

BWEA suggested that we concentrate on the renewable energy technologies identified by the DTI as becoming viable within the coming years; (there is a

Arup

ob title facilitating Planning for Renewable Energy	Job number 112223-00	Date of Meeting 27 September 2002	Action
report on anticipated developments and 2010). Arup to obtain report	covering time horizo	ons including 2003-05,	Arup
FoEC raised the issue that different impacts; the tool should be sensitive (WDA): Issues for short rotation co harvesting. (RSPB): Look at forest residues plu (WDA): there is a conflict of intere (Dulas): use miscanthus and other start to review and report on technology.	e to these. Oppice are land qualit as waste wood. Est between forestry a Species rather than ju	y and access for and biomass crops.	Arup
EA stated that the tool should focus usefully presented in a GIS; for exacontentious issues for hydro power	ample, it may not be	th issues which can be possible to address the	
Dulas have hydro information which hydro power should be included in Arup to contact Dulas separately.	ch they are willing to the tool.	share with Arup;	Arup
WCE – the [on-shore] resources / to biomass and hydro. Post-meeting note: there seemed to			
WWF – consider standalone schem (WDA): consider local distributor network can absorb where. (CCW): there are intermittency iss	network as well as n	nnection. ational grid: what the	
FoEC – not all the technologies are allowing for grid capacity issues a should take this into consideration	nd a few physical co	: some can share areas, nstraints. Our tool	
Scale Dulas – the scale of consideration technologies should be treated diff scales of development; with regard regardless of the scale of the schero	ferently – landscapes d to hydro, some imp	might absorb different pacts are the same	
- the Arup tool could address of Schedule 2.	only those schemes v	vhich require EIA under	
WAG (AB) – if scheme is substantool to address. If EIA not required (CCW): the EIA cut-off is not as soff is 5mW and this could be produced.	d, guidance notes sho straightforward as it s	ould suffice. seems because the cut	
Post-meeting note: general agreed threshold? No comments made regarding the			

Job title Facilitating Planning for Renewable Energy	Job number 112223-00	Date of Meeting 27 September 2002	Action

5. Scope of the planning tool - users

Dulas stated that the tool must be available to developers (as well as local authorities and others). The tool should be developers' first port of call when considering the location of new renewable energy schemes.

CCW expect the users of their wind mapping tool to be local government forward planners (to look at regional targets), central government (as a strategic planning tool), developers and development control officers.

Sensitivity tests

FoE Cymru suggest that sensitivity testing should be undertaken to demonstrate the effects of setting the 'sliding bars' at different levels.

WAG (AB) – perhaps the Technical Advisory Group should set the limits within which users can move the 'sliding bars'? These will ultimately feed into UDPs, which will eventually be identifying areas of search.

WCE – the tool could be tested against the targets for renewable energy which have been / will be set, and would then [have to] be calibrated against what is reasonable.

Arup (SP) – to do this for all of Wales is beyond the scope of the current brief, but potentially very useful.

CCW – the decision-maker should decide on the weighting; this must be done in the context of the total resource in relation to the total demand. A scenario-based approach.

7. Landscape impacts

CRPW suggest that the impact of renewable energy is generally largest on the landscape, an impact which is different according to subjective opinion. There was wide agreement that there is conflict inherent in a tool which aims to be objective and yet seeks to methodically assess subjective elements.

Biodiversity impacts

RSPB – the biodiversity side of the Arup tool is not clearly defined at this stage – requires further work.

9. Issues for the Planning Process

BWEA:

- lack of (big) fixed targets
- lack of policy commitment from WAG
- objections from statutory bodies

CPR W.

- planning system maintains that we need to protect landscape

Dulas:

- definition of 'acceptable' impacts in planning

WCE:

- the need to meet '10% renewable' government targets

Arup

Job title Facilitating Planning for Renewable Energy	Job number 112223-00	Date of Meeting 27 September 2002	Action

- outdated planning policy
- no 'need' argument set out in planning system
- in summary, we need targets and a tool

WDA:

- perception that Wales is closed for business (strong contrast with Scotland)
- lack of clear frameworks
- lack of policies that presume in favour of renewable energy
- lack of indigenous manufacturers of renewable energy equipment

CCW:

- criteria-based planning raises problems at Public Inquiry
- lack of co-operation between developers and CCW

WAG (CM): the Wales Spatial Plan may become statutory at some point in the future; the Minister has concerns about criteria-based planning

RSPB:

differences between 'serious commercial development' and 'sustainable' schemes: the location and scale of development have been inappropriate thus far [RSPB in favour of smaller-scale schemes?]

(WDA): UK government policy dictates that this is a market force driven industry; this determines the commercial scale of development

would it be possible for TAG to let Arup see the revisions of TAN 8 annexes to date?

WAGto investigate

Technical aspects of the planning tool 10.

Arup expect the tool to be web-based.

There was wide support for a web-based approach, as this offers benefits in terms of public accessibility among others. CCW warned however that their current tool would not be well suited to the internet, {why?}, and advised that the development of the Arup methodology should not be hindered by the need to put the final output on the internet. The tool is for assisting the apportionment of targets in Wales: a 'cascade' of thinking down from the national level.

The accuracy of databases will be an important limit to the effectiveness of the tool.

WDA advised that the Arup tool must incorporate existing capacity within renewable energy in Wales. (WDA has some information about this). Arup (SP): to do this beyond the case study area may be outside the current brief, but again very useful?

Data licenses are an issue.

CCW - The more constraints there are on the map, the more certainty can be attached to non-constrained areas.

Data issues

wind speed maps are inadequate re: height from ground, and need

©Arup F0.5

Job title Facilitatin	ng Planning for Renewable Energy	Job number 112223-00	Date of Meeting 27 September 2002	Action
	better resolution ii) derived data sets – e.g. visibi use these? Or will e.g. AONI		Parks: do we need to	
	iii) What about looking at previous occurred' (i.e. confrontation	ous history of 'when in the planning pro	cess)?	
	iv) Unfulfilled [landscape/nature problematic when/if any plan BWEA – the CCW map identifies 'a	nning applications a	are submitted	
	to our application there on landscape WAG (CM) – CCW should tell us if CCW – will endeavour to pass that I	grounds. they are <i>considerin</i>	g designating any sites	CCW
	Post-meeting note: the Arup brief do instead expected us to utilise dataset study area.	es not involve data. s where available,	set creation per se, but especially for the case	
	WDA: the tool needs to deal with ab incorporate the political decisions w weightings)	solute technical con hich will need to be	nstraints, then to made (i.e. the	
11.	Future commitments			
	Arup agreed with WAG request to b meeting for illustrative purposes.	ring indicative map	s to the next TAG	Arup

C:\TEMP\MINUTES 27-09-02 REVIEWED.DOC

Smith, Joanne (ESH - Planning)

Simon Power [simon-j.power@arup.com] From: 12 September 2002 15:59 Sent: westcoastenergy.co.uk';)care4free.net'; To: Dccw.gov.uk'; Dcprw.org.uk; britishbiogen.co.uk; @rspb.org.uk @pembrokeshirecoast.org.uk; '-)dulas.org.uk @wwf.org.uk @bridgend.gov.uk"; @environment-agency.gov.uk"; @aber.ac.uk"; @wda.co.uk Smith, Joanne (TPE); Morgan, Chris G (TPE); Scott, Linda (Planning); Cc: @powys.gov.uk";),4

Subject:

RE: Renewable Energy TAG/Steering Group

Attachments: WAG Facilitating Planning for Renewable Energy Contract 105 2002 SP.doc

Dear TAG members

I would like to take the opportunity of introducing myself. I am the project manager/lead researcher for the Arup team undertaking the research project 'Facilitating Planning for Renewable Energy'. I enclose a copy of our tender document, which should tell you something about us and our proposals.

Following discussions with the Assembly the venue for the TAG/Steering group meeting on the 27th September 2002 (see below) has been moved from Aberystwyth to Welshpool to faciltate easier access/parking etc. The new venue is the Powys County Council Offices (Neuadd Maldwyn) Severn Road, Welshpool. Time and format is as before. Directions follow below underneath my address. Any queries on the directions to be directed towards Andy Bull!

Unfortunately I am away next week (16th-20th) on a pre-arranged holiday (in Mid-Wales though - bit of a busmans holiday!), but my colleague Jillian Hastings (jillian.hastings@arup.com) should be able to answer any questions you might have in the meantime.

Regarding the Steering Panel meeting - in view of the numbers attending we are considering running the meeting in 'workshop/Inquiry by Design style'. For example I would like to try getting the panel to break-up into small groups to consider specific issues and report back to the overall meeting using flip charts etc. The aim would be for us to come away with some form of consenus on :-

- * which renewable technologies the study should address
- * what previous work does the panel know of which is similar to (or could contribute to)to our research
- * who else (if anyone) needs to be invited onto the panel or at least consulted as part of the study
- * initial views on our summary of the principal issues associated with the technologies we should address (as set out within our tender) and ideally, intial views on our initial criteria
- * available datasets of information

We will develop a more detailed agenda nearer the time. Otherwise I (and the team) look forward to meeting you on the 27th.

PS -	sand ∦	has passed to me your apologies - Is it possible for either of you to
send a deputy?		

Regards Simon

Simon Power
Associate (Environment and Planning)

Arup

4 Pierhead Street, Capital Waterside, Cardiff CF10 4QP

Tel: +44 (0)29 2026 6593 Fax: +44 (0)29 2047 2277 simon-j.power@arup.com

www.arup.com

Instructions to Neuadd Maldwyn (Council Offices) Severn Road, Welshpool

From the north or east. Head south on the A483 towards Welshpool, past the roundabout where the A458 and A483 meet. At the next roundabout take the second exit (one of the right turns) towards the town centre. At the mini-roundabout that follows almost immediately turn right still heading into town. This is Severn Road - Neuadd Maldwyn is on your right. Don't go to reception. Head to the door on the left of the block that sits back off the road. Go through that door. Head to the right of the stairs and go into the Council Chamber. The Committee Room is through the Council Chamber.

From the west. Straight through Welshpool town centre to the traffic lights at the crossroads. Straight on. This is Severn Road and Neuadd Maldwyn is on your left (400m after lights?) See above to find the room.

From the south. As you approach Welshpool stick with the A483 (bypass) until you get to the roundabout just after the old railway station shopping complex (footbridge across the road) - Edinburgh Woolen Mill et al. Left (first exit) at that roundabout. Then right at the mini-roundabout. This Severn Road. Neuadd Maldwyn on your right. See "north and east" instructions for finding the room.

By Rail. Welshpool station is very close. Cross the footbridge towards the town centre. Severn Road is straight ahead over the mini-roundabout. Neuadd Maldwyn is on the right. See "north and east" instructions to find the room.

----Original Message----From: Scott, Linda (Planning) [mailto:Linda.Scott@wales.gsi.gov.uk] Sent: 06 September 2002 15:06 Dcare4free.net'; To: @ccw.gov.uk'; powys.gov.uk"; westcoastenergy.co.uk'; pcprw.org.uk; »britishbiogen.co.uk @rspb.org.uk; @dulas.org.uk awwf.org.uk; hyder.com @pembrokeshirecoast.org.uk; '-@environment-agency.gov.uk"; @aber.ac.uk"; Dbridgend.gov.uk"; wda.co.uk Cc: Smith, Joanne (TPE); Morgan, Chris G (TPE); 'simon-j.power@arup.com' Subject: Renewable Energy TAG/Steering Group

Dear TAG members

please could you note your diaries that the next meeting will be on Friday 27 September, at University of Aberystwyth, at 10.30am to be followed by the first Steering Group meeting for the research project 'Facilitating Planning for Renewable Energy' at 11.30 - 3pm (includes a buffet lunch at 1pm). Agenda to follow as soon as possible.

Linda Scott Planning 4 02920-823711