

# Addroddiad Adolygu Dylunio Design Review Report

#### **DATGANIADAU O DDIDDORDEB**

Mae gofyn i aelodau o'r panel, arsyllwyr a phartïon perthnasol eraill ddatgan unrhyw ddiddordebau sydd ganddynt **ymlaen llaw** mewn perthynas â'r eitemau Panel Adolygu Dylunio Bydd unrhyw ddatganiadau o'r fath yn cael eu cofnodi yma ac yng nghofnodion canolog Comisiwn Dylunio Cymru.

#### **DECLARATIONS OF INTERESTS**

Panel members, observers and other relevant parties are required to declare *in advance* any interests they may have in relation to the Design Review Agenda items. Any such declarations are recorded here and in DCfW's central records.

#### Statws adolygu/Review status

Dyddiad cyfarfod/meeting date
Dyddiad cyhoeddi/issue date
Lleoliad y cynllun/scheme location
Disgrifiad y cynllun/scheme description
Statws cynllunio/planning status

Datganiadau o ddiddordeb/declaration of interests

### **Cyfrinachol/Confidential**

24th August 2011 6th September 2011 Project Green, Llanwern Energy from Waste Cyn gwneud cais/ pre-application None

#### Adran 1/part 1 Cyflwyniad/Presentation

Project Green is a partnership formed between the five local authorities of Cardiff, Monmouthshire, Newport, Caerphilly and Vale of Glamorgan, to offer the best environmental, cost effective and practical solution to the treatment of municipal solid waste.

This proposal is for an Energy from Waste (EfW) plant located on a brownfield site within the Llanwern Steelworks complex east of Newport, and to the south of the Queensway. The site lies on a boundary between industrial buildings and uses to the north and west, and the natural landscape of the Gwent Levels to the south and east. The CHP plant will produce waste heat as a byproduct of electricity generation and this will be used by the Tata steelworks to the immediate north.

The design has been driven by the site context and by the industrial processes which the building accommodates. The design team have visited the RSPB Wetlands Visitor Centre, located in a similar position at the edge of the Levels. An integrated design approach ensures that technical and design issues progress in tandem. A visitor facility is included with a terrace overlooking the reens, intended to link an awareness of the natural landscape with the waste treatment bunker immediately behind. A green corridor to the east incorporates surface water management. The developer and designer have a 20 year long partnership and extensive international experience in delivering large scale infrastructural schemes.

The local authority believe that the site is appropriate as brownfield, contaminated land allocated for waste use. However, its location on the fringe of a historical and archaeologically important landscape, requires a sensitive response. The LPA are impressed by the design of the building and recognise that the area is undergoing transformation, with a new residential development on site to the north west, and the upgrading of the Queensway as part of the south circular road, with a direct link to the M4.

Crynodeb o'r prif bwyntiau a gododd o'r drafodaeth, i'w darllen ochr yn ochr ag Adran 2 yr adroddiad hwn.
Summary of key points arising from discussion, to be read in conjunction with Part 2 of this report.

The Panel appreciated the excellent presentation of this important project, and the awareness demonstrated by the team of the significance of the site and its relation with the landscape of the Gwent Levels. We think this could be a potential exemplar for projects of this kind, provided that future possibilities for community heating are explored, and the landscape strategy is followed through. In summary:

- The high quality of this proposal rests largely on the partnership and cooperation within the team, and we applaud the decision to use a design-focussed architect with decades of experience in this area.
- We are delighted that this proposal comes forward with an end use for waste heat already agreed. However, we think it is very important that this technology is seen to benefit the wider community and we urge the team to build in flexibility for other uses in the future.
- We think that the response to site and context is good, although some low level views taken from close up will be necessary for a full assessment.
- Having questioned the eastern elevational treatment, we now accept that it is appropriate, but we we think a transparent western elevation could add interest and greater visual experience.
- We think the visitor platform should be enlarged and not treated as a confidential space.
- We accept the arguments in favour of polycarbonate cladding, and would welcome any crossover from the Tata funded research at WSA.

- The recycling of the bottom ash into a usable product, carried out on site, is to be commended.
- More information needs to be supplied on possible light pollution, with night-time visualisation especially important.
- We urged the team to avoid galvanised fencing and where possible use the landscape to form an effective boundary, especially to the south.

# Adran 2/part 2 Trafodaeth ac Ymateb y Panel yn Llawn Discussion and panel response in full

The Panel was informed that the generating capacity of this scheme is 23 MW of electrical ouput, and it would not therefore go through the Infrastructure Planning Commission (IPC). It is intended to submit a planning application by the end of October in order to align with the procurement process. The developer has a contractual arrangement with Tata Steel to take all the waste heat in the form of steam produced by the plant.

The Panel strongly welcomed the priority given to finding a user for the waste heat generated in this process, and we understood that this had informed the choice of site. The excellent presentation of this scheme enabled us to understand the rationale of the design development and its response to the site. It also bore witness to the quality of the design team and the long and successful working partnership between architect and client.

The Panel appreciated the strong north/south relationship established by the building, reflecting the industrial/rural context, but thought that the east/west relationship was less well resolved. We questioned the similar treatments of the west and east elevations, given that the former faces a site likely to be developed for industrial/commercial use, and the latter faces a significant natural landscape. The architect accepted that detailed design work had yet to be done, but would be driven by the symmetry of the two one-way ramps. The local authority affirmed that the south elevation was the most sensitive one in terms of response to the landscape. The Panel suggested that the west facade could be made more transparent, opening up views of the processes inside, and the team agreed to consider this. A masterplan should be prepared for the area to the west so that this building can be set in an appropriate wider context.

The relationship of this scheme to the new residential development to the north west, plus any new development to the south of the Queensway, will need to be sensitively handled. The Panel would like to see opportunities explored for the supply of low cost, low carbon heat to these new developments, which would offer significant community benefits. While this may not be achievable immediately, we think that future flexibility should be built in, both to this scheme and any new schemes coming forward, so that this plant is seen to be making a positive contribution to tackling fuel poverty and enabling low carbon developments. This approach could also be supported by the local authority via design briefs, SPG, or by setting development-wide CO<sub>2</sub> reduction targets.

The Panel welcomed the provision of the visitor facility and platform, and the intention to present the plant as a positive attraction to schools and other interested groups. Given this ambition we thought that the platform should be enlarged to be able to accommodate more people, especially as many visitors will arrive by bus, in groups of around 50-60 at one time.

The architect explained the rationale for the use of polycarbonate cladding on the walls and roof. The newer versions of polycarbonate are self cleaning, retain their original transparency with no yellowing, are easily shaped and come in 30m long panels which minimises junctions. The advantages of high levels of natural light in a space which needs no insulation, are self-evident. The Panel observed that Tata are funding research into cladding technologies at the Welsh School of Architecture and trusted that this research would inform the design where appropriate. We did suggest that some close-up, low level views of the building would be useful.

Given the 24 hour operation of the site, the Panel raised the possibility of night-time light pollution through the transparent roof. We were informed that the effect of the polycarbonate filter would be to produce a 'soft glow', but this will need to be verified with evidential support.

We were informed that the 'bottom ash' from the incinerator would be recycled on site, and reused as an aggregate replacement, apart from a small amount of fly ash residue (the product of air pollution treatment) which would be transported to another Veolia site for safe disposal.

In terms of boundary treatments, the Panel hoped that this could be done without the use of standard galvanised fencing, and that the landscape itself could be used to form an effective boundary.

Mae Panel Adolygu Dylunio Comisiwn Dylunio Cymru a'r staff yn croesawu rhagor o ymgynghoriad, a bydd yn hapus i ddarparu rhagor o adborth am yr adroddiad yma a/neu lle bo'n briodol, dderbyn cyflwyniadau pellach. Diolch am ymgynghori â'r Comisiwn a chadwch mewn cysylltiad â ni os gwelwch yn dda ynglŷn â hynt eich prosiect. A fyddech gystal â'n hysbysu o ddatblygiad eich prosiect. Diolch yn fawr am ymgynghori â'r Comisiwn.

The Design Commission for Wales Design Review Panel welcomes further consultation and we will be happy to provide further feedback on this report and/or where appropriate, to receive further presentations. Please keep us informed of the progress of your project. Thank you for consulting the Commission.

Mae copi iath Gymraeg o'r adroddiad hwn ar gael ar ofyn. A Welsh language copy of this report is available upon request.

### Atodiad 1/appendix 1 Mynychwyr/attendees

Asiant/Client/Datblygwr Veolia Environmental Services
Agent/Client/Developer (Alastair Pettigrew, Owen Dimond)

Pensaer/Dylunydd Trefol S'pace Architects (Jean-Robert Mazaud) Architectural/Urban Designer

Ymgynghorwyr/Consultants SKM Enviros (Simon Myers)

Trydydd Parti/Third Party n/a

Awdurdod Cynllunio/Planning Authority Newport CC (Tracey Brooks)

Y Panel Adolygu Dylunio/ Design Review Panel Cadeirydd/Chair

Cadeirydd/Chair
Swydog/Officer
Cindy Harris
Prif Banelydd/Lead Panellist
Simon Hartley
Mark Hallett
Simon Carne
Steve Smith

Sylwedyddion/Observers n/a