

Retrospective Voluntary Environmental Statement:
Document 4: Non-Technical Summary

Barry Dock Biomass Facility, Woodham Road

Biomass UK No.2 Ltd

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Introduction

This Non-Technical Summary document provides a summary of an Environmental Statement (ES) and has been prepared by Castellum Consulting on behalf of the developer of the Biomass Power facility at Woodham Road, Barry Docks (the “Site”). The principle of developing the site for the Biomass facility was established by a planning permission 2008/01203/FUL (the “2010 Permission”) which was approved on appeal. The detail of this development was subsequently amended by permission reference 2015/00031/OUT (the “2015 Permission”), which was granted by the Vale of Glamorgan Council (The Council).

The application for the 2015 Permission was made to the Council who screened the application and concluded that the development did not require an Environmental Impact Assessment, a decision which was supported by the Welsh Assembly Government (“WAG”)

The application was then recommended for approval, and granted consent in July 2015.

In summary, the 2015 Permission granted the following changes, relative to the 2010 Permission:

- Technology: a change in the manufacturer of the technology. The proposed technology was chosen as it is more efficient and to improve the average annual power output to 10 MWe compared to 9.0 MWe in the 2010 Permission.
- Layout: the proposed technology at the project Site required a different layout of buildings. The footprint of these buildings is 7.5% less than under the 2010 Permission.
- Elevations: the revised layout comprised two buildings that were lower than the building height in the 2010 Permission and one that was higher. In order to meet emissions requirements, the application sought a stack height increased to 43m.

The ES that this NTS summarises is part of a package of documents being submitted voluntarily to the Welsh Assembly Government. The intention of the submission is to provide a review of environmental information that was submitted alongside the 2015 Application which sought to alter details of the 2010 Permission.

The developer has voluntarily prepared this statement with the aim of demonstrating that the decision made by the Council in 2015 to grant the updated planning consent would not have been affected by the presentation of the relevant environmental information in the form of an ES.

This ES aims to provide an objective account of the possible environmental effects of the proposed development by setting out the results of the Environmental Studies which were undertaken and submitted in support of the 2015 Permission. The ES has been prepared in line with the framework provided in the Town and Country Planning (Environmental Impact Assessment) (England and Wales)

Regulations 1999, as amended, with regard to the guidance set out in Welsh Office Circular 11/99 “Environmental Impact Assessment”, which was the relevant law at the time of the 2015 Permission.

Application Submission Package

This NTS is one of four principal documents. The package comprises:

- Document 1: Environmental Statement (Main document);
- Document 2: Environmental Statement (Appendices);
- Document 3: Waste Policy Assessment; and
- Document 4: A Non-Technical Summary of the ES.

The NTS has been produced as a separate document and is a mandatory part of the Environmental Statement (‘ES’). This provides, in non-technical language, a brief summary of the likely significant effects that the proposed changes to the approved development would have on the environment.

Paper copies of the full ES can be obtained from the developer at the following address:

Biomass UK No.2 Ltd

Barry Energy Production Facility

Woodham Road, Barry Docks,

Vale of Glamorgan, CF63 4JE

The ES and other accompanying documents are available in either paper (for which a charge of £250 will be made) or electronic format. A free copy of the Non-Technical Summary is available on request.

Description of the Proposed Development

The development proposed in the 2015 Application comprised the following changes to the 2010 Permission:

- **Technology:** a change in the manufacturer of the advanced conversion technology (ACT) from gasification based on pyrolysis to one based on a fluidised-bed. The proposed technology was considered more fuel efficient contributing to improved average annual power outputs of 10 MWe compared to 9.0 MWe in the 2010 Permission.
- **Layout:** accommodation the change in technology at the Site required a different configuration of the buildings housing the various components – the 2010 Permission required a single principle structure, while the revised layout broke this up into three separate but connected buildings. The footprint of these buildings is given as 7.5% less than under the 2010 Permission.
- **Elevations:** the revised layout comprised two buildings that were lower than the building height in the 2010 Permission and one that was higher. The average building height of the 2010 Permission was 14m while the average building height of the revised layout is 16.3m. In order to meet emissions requirements and based upon an iterative modelling exercise an increase in stack height of 43m was sought. This was less than the stack height that had been approved for the waste-energy plant at Atlantic Way on the opposite side of the dock.

Changes to Elevations and Layout

The development proposed by the 2015 Application was to rearrange the plant approved by the 2010 Permission from its original layout as a single building into three connected buildings, with some additional external structures and an increased height of stack for the venting of exhaust from the plant.

The 2015 Application proposed that the finishes of the structures were to be as per the original approval,

‘steel portal frame construction, to be surfaced with micro profile or box cladding to all external elevations. The colour and specification of the panels were to be agreed with the planning authority prior to construction¹.’

¹ Colour and specifications were subsequently reviewed and agreed with VoGC in 2016 as part of an application to discharge the applicable planning condition (2015/0031/1/CD)

The proposed elevations of the 2015 Application are shown below:

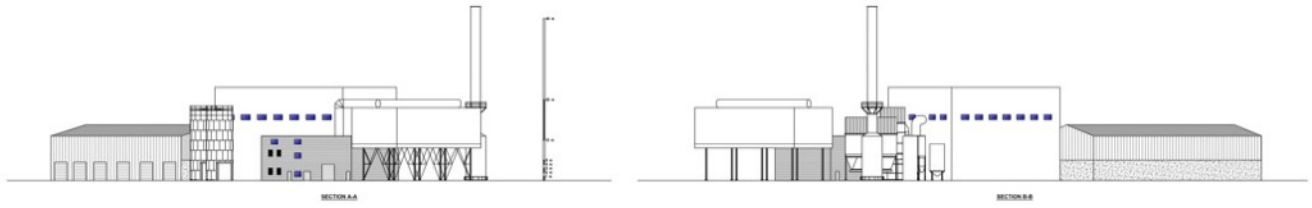


Figure 1 2015 Application Elevations

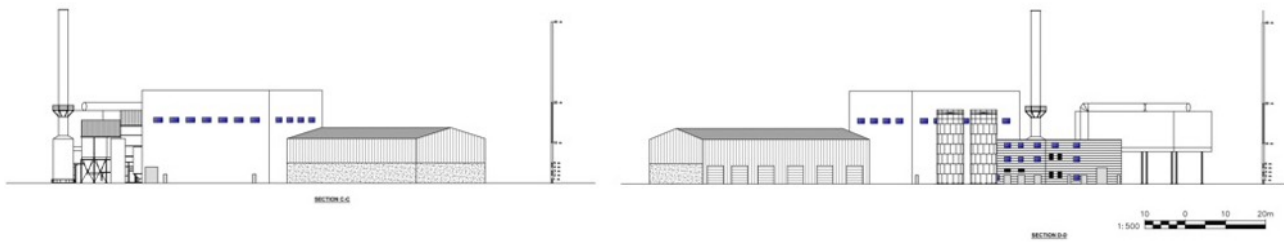


Figure 2 2015 Application Elevations

The 2015 Application proposed to separate the power plant functions into separate structures to accommodate the revised plant. The result of the proposed changes was a net 7.5% reduction in building footprint at the Site. Details of the main structures are as follows:

- Fuel Storage and Feed Building at 52.4 x 21.6 x 13.7m high
- Turbine, Welfare & Ancillaries Building at 29.1 x 17.9 x 11m high
- Main Process Building: at 41.4 x 20.4 x 23m high
- An external air cooled condenser (ACC) unit (32m x 14.5m x 20m high) mounted on steel stilts.
- External Equipment: ash residue from the combustion process was to be stored in two externally located silos (18.4m high x 6.7m diameter)
- Flue Gas treatment (FGT), exhausting to the chimney stack was also to be external to the buildings.
- Chimney Stack: the chimney stack was to be re-sited some 20m to the south-east relative to the original location and was to be increased to 43m (which is less than the stack height approved for the waste-energy plant that had been approved for construction at Atlantic Way on the opposite side of the dock).

The internal layout that was proposed is shown below.



Figure 3 2015 Application Indicative Internal Layout

Operational Details and Processes

The operational details of the plant were to be in line with the 2010 Permission, with the exception of the fact that fuel would be delivered to the Site during a 12 hour day between 07:00 and 19:00 hours on weekdays only.

Weekend deliveries would be restricted to emergency deliveries only (where required to avoid an interruption in the operation).

The plant would operate and provide electricity to the grid 24 hours per day. The entrance gates were to be closed at the end of the working day.

As with the 2010 Permission, the revised plant continued to require an Environmental Permit, now from the Environment Agency Wales' successor, Natural Resources Wales.²

Chapter 1 of the full ES provides a full description of the development proposed by the 2015 Application.

² An Environmental Permit has now been granted by Natural Resources Wales (EPR/AB3790ZB) following extensive public consultation. This permit required the full and detailed assessment of all processes, activities and their associated environmental releases and impacts. The permit has been secured on the basis that all impacts have been deemed by the NRW as both being acceptable and meeting the EU Sector definition of 'Best Available Techniques' (BAT).

The Site

The land upon which the Barry Dock Biomass facility (the facility) has been constructed (referred to as the application Site) is located within the Barry Docks area within the town of Barry in the Vale of Glamorgan administrative area. Barry lies within the southern part of the Vale of Glamorgan, centrally on the South Wales coastline. The location of the application Site is shown below in detail.



Figure 4 Regional Location. Sourced from Magic.gov.uk

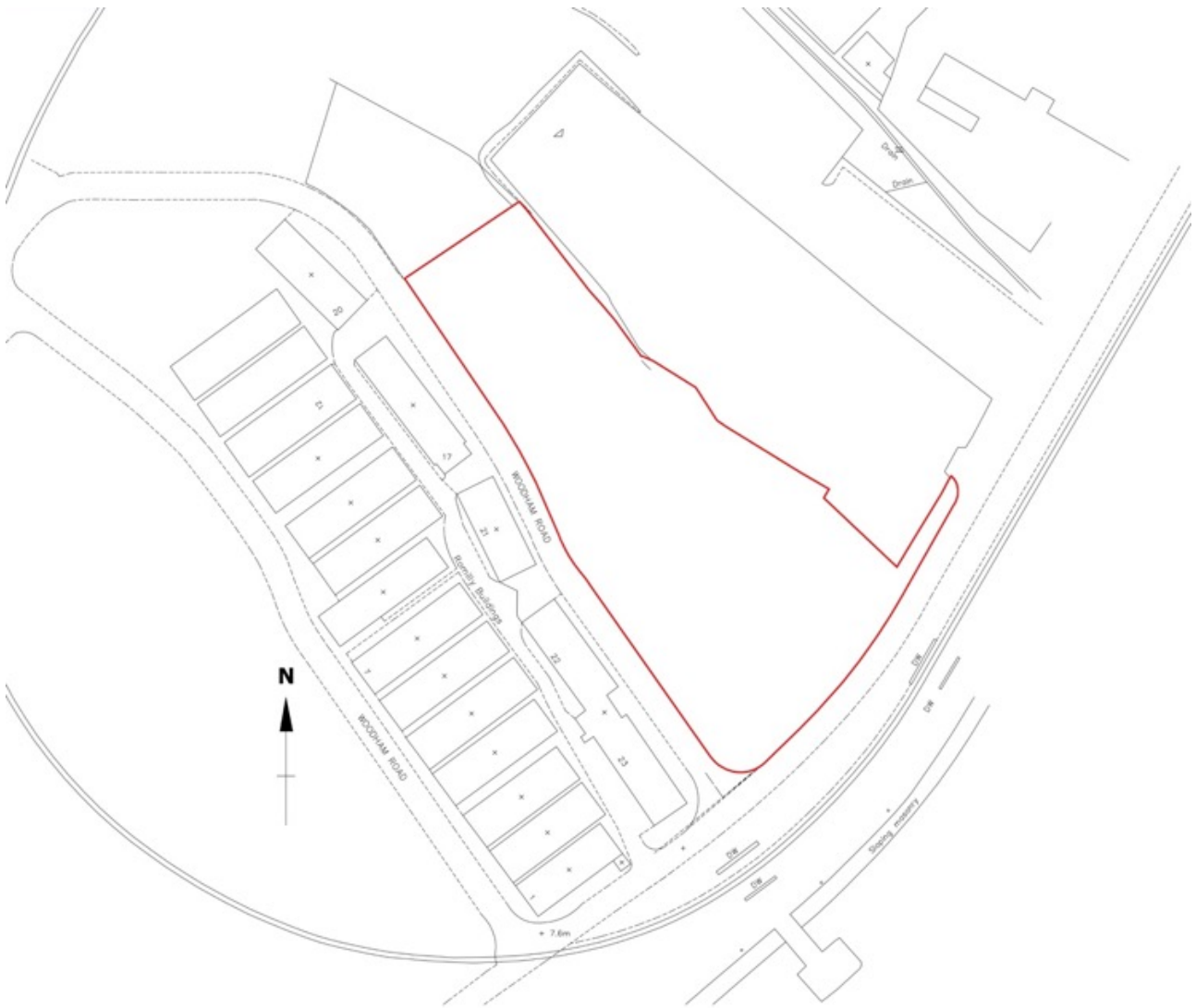


Figure 5 Immediate surroundings and 2015 Application planning boundary

The development Site is located on existing industrial land within the Port of Barry which is an established business and industrial area in the Vale of Glamorgan. The Site location is shown in the above Figures and on Drawing Location Plan (20/03/2015) at Appendix 1(1).

At the time of the 2015 Application the Site was substantially vacant, having been previously occupied by a container storage and refurbishment operation of which part of the refurbishment operation relating to containers remained.

The Site is considered previously developed land, and at the time of the 2015 Application consisted only of a compacted hard standing surface which was not vegetated.



Figure 6 Immediate surroundings of the Site, taken from Google Earth Pro, 18/08/2019 using photography from 08/2016

There were, and are, no sites with sensitive flora or fauna having a statutory or local nature conservation designation within 500 metres of the Site in the Groundsure Report. The nearest designated site is the SSSI named Hayes Point to Bendrick Rock at a distance of 616 metres from the Site.

The Site has no clearly defined planning history prior to the current project, but it has been in industrial uses for over 100 years.



Figure 7 Wider surroundings of the Site, taken from Google Earth Pro, 18/08/2019 using photography from 08/2016

Chapter 2 of the ES provides detailed information on the site and its surroundings.

Air Quality

The 2015 Application was accompanied by two technical reports on air quality to address issues relating to the impacts of the changes proposed by the 2015 Application. These changes were to amend the layout and elevations in order to accommodate a change in technology for the project.

The first study, carried out by Stopford Energy and Environment, was designed primarily to determine an appropriate height for the stack. The second study, carried out by Entran Ltd, was a full air quality assessment commissioned at the request of the Council in response to consultation feedback and prior to the 2015 Application being presented to committee.

Following the grant of the 2015 Permission, the Entran air quality assessment formed part of the application for an Environmental Permit, and was specifically designed to secure the approval of the regulator. This assessment was reviewed in detail by Natural Resources Wales (NRW) during determination of the application for an Environmental Permit to ensure that the facility would not cause significant pollution to the environment or harm human health. The assessment is provided as a technical report in Appendix 1(2) of the full ES.

2015 Application Construction Impacts.

The impacts of the construction phase were considered within the 2010 Permission. The 2015 Application was assessed as making no significant changes to the impacts which would be caused, the mitigation measures that would be employed, or the residual impact. Therefore, as with the 2010 Permission, it was anticipated that the impacts associated with construction, before mitigation, are regarded as Minor, and after mitigation are of Negligible significance.

2015 Application Operational Impacts.

The 2015 Application sought to amend the layout and elevations approved by the 2010 Permission, to accommodate a change in technology for the project.

Because of the proposed changes to the buildings and technology, a study was carried out to work out the most effective height for the exhaust stack. This was carried out by Stopford Energy and Environment and was designed to select an appropriate height for the stack.

The study concluded that in order to meet the target of achieving negligible impacts at all sensitive receptors, the stack should be 43m in height. Above this very little benefit was gained by making the stack higher. Therefore, 43m was adopted as the proposed stack height.

Using the findings of this study, a further Air Quality Assessment was carried out by Entran in support of the application to Natural Resources Wales for the Environmental Permit which the facility required

in order to operate. This study was also made available to support the 2015 Application planning process.

The study concluded that for a 43m stack, predicted maximum off-site process concentrations were well within the relevant air quality standards for all pollutants that were considered. The significance of the impacts has been assessed as negligible, in accordance with the guidance followed by Natural Resources Wales.

The following table summarises the findings of the studies.

Environmental Topic		Impact		Description of Mitigation	Residual Impact	
		Description	Significance		Description	Significance
Air Quality	Construction	Dust and vehicle exhaust	Minor	Vehicle maintenance, dust damping and sweeping	No long term effects	Negligible
	Operation	Process emissions	Negligible	Stack height, emissions treatment and filtering	No residual effects	Negligible

Figure 8 2015 Application Impact Summary Table

Full details of the studies are presented in Chapter 3 of the full ES.

The 2010 Permission was supported by an assessment of noise by AB Acoustics. This concluded that if the specified internal level of noise generated by the development 90 dBA is achieved then the external level from the proposed plant at the various receptor locations would be equal to or less than the measured background level - this is an indication that complaints about noise will not be received.

A summary of the impacts is presented in the table below. Noise impact significance criteria are to be found at Appendix 4 of the full ES.

Environmental Topic	Impact	Impact		Description of Mitigation	Residual Impact	
		Description	Significance		Description	Significance
Noise	Construction	General vehicle noise, piling.	Moderate	Limitation of construction hours to between 07:00h and 18:00h	No long term effects	Minor
	Operation	General operation of plant	Minor	Limiting internal noise to 90dB, noise attenuation factor of cladding to buildings, no roof lights	No residual effects	No change/ Negligible

Figure 10 2010 Permission Impact Summary Table³

³ Castellum interpretation of the findings of the relevant noise assessments, based on the noise impact significance criteria detailed in Appendix 4

2015 Application Construction Impacts

The impacts of the construction stage were assessed within the noise study by AB Acoustics accompanying the 2010 Permission.

The studies found that 2015 Application makes no substantial changes to either the baseline against which these were assessed (construction will be daytime only and the background noise levels measured by Hunter Acoustics remain the same as those in 2010), the impacts which would be caused (the same pattern and type of construction activity is anticipated), the mitigation measures that would be used, or the residual impact.

Therefore, as with the 2010 Permission, it is anticipated that the significance of the impacts⁴ associated with construction noise before mitigation are regarded as Moderate, and after mitigation are of Minor significance.

2015 Application Operational Impacts

The 2015 Application changed the layout and elevations approved by the 2010 Permission, in order to accommodate a change in technology for the project.

The developer confirmed that the design standards for the noise impact of the 2015 Application were intended to be the same as those described within the 2010 Permission – that the sound levels from the proposed operation would remain as per the 2010 Permission.

To confirm that there were no changes to impacts, an updated noise survey was carried out at the same locations to check whether background noise levels had changed.

The study found that the daytime noise levels remained the same, but that the night time noise level at one location (Cei Dafydd) had fallen slightly.

Using the findings of this survey, a further noise report was prepared by AB Acoustics to check the impact of the 2015 Application plant on the re-studied noise levels.

In each of the three locations, the report concluded that the proposed development would have a Low impact, with noise impact significance that conforms to the 'minor' description.⁵

The report goes on to note that it is important to remember that these finding should be considered in the context of the plant's setting in an established and existing industrial area.

In addition, the houses around the plant are very likely to have double glazed units to their windows which could result in further reductions in external noise of up to 25 dB.

⁴ Castellum interpretation of the findings of the relevant noise assessments, based on the noise impact significance criteria detailed in Appendix 4

⁵ Castellum interpretation of the findings of the relevant noise assessments, based on the noise impact significance criteria detailed in Appendix 4

Even with the window open, and assuming a noise reduction for an open window of around 13 dB (the World Health Organisation actually assumes 15 dB) then the internal levels within the nearby residential properties will be within the requirements of BS 8233: 2014.

Environmental Topic	Impact	Impact		Description of Mitigation	Residual Impact	
		Description	Significance		Description	Significance
Noise	Construction	General vehicle noise, piling.	Moderate	Limitation of construction hours to between 07:00h and 18:00h	No long term effects	Minor
	Operation	Process noise	Minor	Limiting internal noise to 90dB, noise attenuation factor of cladding to buildings, no roof lights	No residual effects	Minor

Figure 11 2015 Application Impact Summary⁶

Full details of the noise assessments are provided at Chapter 4 of the full ES document.

⁶ Castellum interpretation of the findings of the relevant noise assessments, based on the noise impact significance criteria detailed in Appendix 4

Landscape and Visual Impact

UK Power Development Partners (UKPDP) were commissioned to prepare a report to address issues relating to the landscape and visual impact of the changes proposed by the 2015 Application. These changes were to amend the layout and elevations in order to accommodate a change in technology for the project. This report addresses the changes through commentary on, and updates to, the previous Landscape and Visual Impact Assessment for the project prepared for the 2010 Permission and which was supplemented at the appeal in 2010 by an additional assessment prepared by the Appleton Group.

Context and Baseline

The 2010 Permission established the acceptability of the development of the Biomass facility at Woodham Road in Landscape and Visual Impact terms. This was supported by a Landscape and Visual Impact Assessment carried out by the Appleton Group, which was submitted in support of the voluntary ES submitted at the appeal where consent was granted.

This assessment's description of the baseline conditions remained accurate at the time of the 2015 Application and are set out here:

- Neither the Site nor adjacent land is subject to any National or Local designation in landscape terms. It does not fall within an AONB or an Area of Special Landscape.. The Site does not either fall within or adjacent to a designated urban conservation area.
- The Site falls within the 'Barry' landscape area. The Landmap classification for the Site and its surroundings for visual and sensory factors is rated as 'Urban' and the evaluation is 'Low'.
- The Site is open to views from the immediately adjacent road network. Some vegetation adjacent to the eastern boundary gives some low level screening from that direction.
- Distant views are possible from higher ground to the north along Dock View Road. These views are all gained in the context of the Dockland as a whole with large buildings and open storage and the chemical works to the south east. Views may be possible from the upper storey of the Dock office, which being on a highpoint obscures views from further west. Views from Barry Town further north are obscured by the buildings located on Dock View Road itself. Views cannot be gained from the new Millennium Way port access road due to intervening vegetation. Views cannot be gained from the railway or from Barry Dock railway Station for the same reason.
- Longer distant views can be gained from a residential road (Dyfrig Street) located on the eastern edge of Barry Island at a distance of 0.7 km. These views are gained in the context of existing industrial buildings to the west and east of the Site, and the chemical works in the distance.
- From the baseline studies the following sensitive receptors are identified:

- Landscape - The quality of the Site itself in terms of ecology and visual appearance is such that it is not considered to be sensitive in respect of any change that might take place.
- Visual Impact - Views from within industrial areas are not considered to be sensitive. Views from dwellings are normally considered to be sensitive though this has to be tempered with the understanding that there is no right to a view in planning law. Views from roads are not normally considered to be sensitive as they are transient in nature. Views from public footpaths are considered to be sensitive if they are used for recreational purposes or are part of the civic realm

Further useful context is provided by the statements made at the appeal by the inspector and VoGC representatives on the appearance and setting of the building as approved under the 2010 Permission. The inspector confirmed that in his view the Site, 'lies in an industrial area', adding that, 'Looking down from Dock View Road the new building would be seen in the context of the development within the Docks and, in my view, would sit comfortably in its industrial surroundings.'

The council at the same appeal confirmed that they did not object to the appearance of the building.

A further important aspect of the context is the background against which it would be seen from the main places with views of the site. Approval had previously been granted for the construction of the facility known as the Atlantic Way Power Plant, planning permission reference 2009/00021/FUL. At the appeal in 2010, this plant would have provided the backdrop against which the proposed development would have been seen, particularly from Dock View Road, the same location referred to by the inspector in their commentary above.



Figure 12 Extract from Google Earth showing site of approved Atlantic Way Power Plant (purple outline), Barry Biomass site (red outline), and Dock View Road (orange outline)

2015 Application – Construction Impacts

The Appleton Group Landscape and Visual Impact Assessment accompanying the appeal set out the impacts of the 2010 Permission which are summarised below.

The report initially considered construction impacts:

- The construction phase of development would involve the clearance of the Site of existing vegetation, levelling, the excavation of ground for foundations, and the construction of an industrial building with flue stack and external parking areas. There was to be no external storage. The building size was proposed to be 60x45 metres in plan and 14.08 metres to the ridge.
- In landscape terms it was not anticipated that any impacts of significance would arise. This assessment was based upon the lack of any landscape features on the Site worthy of retention, and its derelict appearance.
- In terms of visual impact, views of the construction activity including on-site plant and possibly cranes were expected to be present for a period of 12 months. Such activity might be seen from properties located on Dock View Road, but mainly from the upper floors of properties. Longer distance views would be gained from residential properties located on Barry Island. These views would be gained in the context of adjacent industrial and dock activity.

The assessment considered these impacts to be **Negligible**.

2015 Application – Operational Impacts

The 2015 Application has much in common with the 2010 Permission, and the changes in dimensions to the plant did not significantly alter the way in which the development would sit within the landscape, and the views to the plant during the construction stage. The conclusions about the landscape impact therefore remained valid, and as such the impacts of the construction phase on Visual Amenity and Landscape Character remained **Negligible**.

The Appleton Group report subsequently considered operational impacts:

- The original Appleton report concluded that there would be no adverse landscape impacts during the operational phase.
- The only significant views would be views from domestic property located on Dock View Road and Dyfrig Street. The change in visual impact would be of a new industrial building in a highly industrialised setting. Views gained from the properties described would be gained in the context of substantial structures located on the dockside and a major chemical complex with numerous tall and prominent chimneys.
- Even without mitigation any visual impact was assessed as **negligible** (i.e. imperceptible) assuming that the colour of the building and flue stack was appropriate to its surroundings. The

flue would not emit any plume of smoke or water vapour and would cause no visual impact as a result.

- The existing character of the Site and its surroundings was that of an industrial dockside landscape. The proposed development was considered to be appropriate within its setting and there would be no adverse impact on landscape character.

The 2015 Application proposed changes to the elevations, layout, stack position and height. It remained the case that the principal views were available from Dock View Road and Dyfrig Road and that these views would be available in the context of the industrial setting.

The proposed development remained of a size and appearance in keeping with the industrial developments to the east, and the previously approved Atlantic Way Power Plant. The rearranged structures in terms of elevation and layout continued to have a comparable impact upon the landscape and available views and from Dock View Road would barely break the skyline if at all.

The principal changes were considered to be those to the stack which was to be higher. This, however, was to be seen in the same context described above; both against the background of the industrial area of the docks from the Dock View Road and as one stack among numerous others, for example at the chemical works to the east.

The UKPDP Visual Assessment found that the proposed elevations of the Woodham Road Site were directly comparable to those previously approved for the Atlantic Way Power Plant in scale and general appearance, and observed that in fact the main building hall at the Woodham Road Site is marginally lower. The plant was shown to have a similar visual impact upon the views available from Dock View Road to that of the Atlantic Way Power Plant, which had previously been considered as acceptable by the Council.

Mitigation was considered by the Appleton Group report, mainly in respect of changing the colouring of the structures to a mid-light grey palette, and this remains the case with the 2015 Application. The Appleton Group report did not consider any landscaping to be necessary for screening purposes.

Including this mitigation meant that the already limited impacts are further reduced.

As discussed previously, the 2015 Application shares the majority of its features with the approved 2010 permission, and the changes in dimensions to the plant did not fundamentally alter the way in which the development would interact with the landscape and the views to which the plant would be subject. The conclusions about the landscape context remained valid.

It is considered therefore that these conclusions remained valid even with the change in elevations, stack and layout associated with the 2015 Application, and that as such the impacts of the operational phase on Visual Amenity and Landscape Character would be **Negligible**.

Environmental Topic	Impact	Impact		Description of Mitigation	Residual Impact	
		Description	Significance		Description	Significance
Landscape	Construction	Long views of plant and construction	Negligible	None	None	Negligible
	Operation	Views of revised plant	Negligible	Pale colour palette	Continued industrial development appropriate to context	Negligible

Figure 13 Impact Summary Table

Full details of the Landscape and Visual assessments are provided in Chapter 5 of the full ES document.

Alternatives

The requirement to consider alternatives stems primarily from the requirements of the EIA Regulations.

However, Welsh Office Circular 11/99 explains that the EIA Directive and the EIA Regulations “do not expressly require the developer to study alternatives” (paragraph 83). However, it adds “*the nature of certain developments and their location may make the consideration of alternative sites a material consideration*”.

Therefore, although alternatives are not a legally required part of the ES, they are nonetheless considered by the ES.

Choice of Site

In order to select suitable locations for its plant, the developer had a series of assessment criteria, which were used to select the Barry Dock site, which were all met by the Barry Dock Site. It was in an industrial dockside location surrounded by potential existing and proposed waste heat users. In addition to the surrounding industrial buildings and existing residential properties, the Site was within close proximity to the Barry Waterfront development which was identified as one of WAG'S Zero Carbon Development Masterplan sites 2007-11. The Site was also within 15 miles of waste wood processing facilities and had good highway links. A connection to the national grid had been secured.

It is demonstrable that the requirements are such that the number of sites available as alternatives is severely restricted. This of course is reinforced by the importance of ensuring that a power-generating plant has no adverse environmental impacts. This ES demonstrates that the proposed plant had no adverse environmental impacts.

The Site, having gained consent under the 2010 Permission had a proven ability in planning terms to host the proposed development and as such continued to fulfil the developer's requirements for the Site. Granting permission in 2015 for the revised scheme reconfirmed this.

As such alternative sites were considered.

Choice of Technology

In seeking to optimise the plant in terms of efficiency and output potential, the developer reviewed again the choice of technology available as time had elapsed between the original application and the beginning of the procurement process.

As a result of that review, it was decided to replace the system detailed in the 2010 Permission manufactured by Prestige Thermal Equipment (which produced a 9 MW average net output) with an

alternative system made by the globally established manufacturer Outotec (www.outotec.com). The Outotec technology was more efficient and enabled output to be increased from 9MWe to 10MWe.

The developer considered the revised technology to be better suited to the specific requirements of the Barry scheme and would maximise operational efficiencies and versatility in addition to being viewed as a more established and therefore 'bankable' technology.

It was therefore decided to pursue the change in technology to improve the efficiency and effectiveness of the plant, along with making the funding of the plant more straightforward.

Finally, consideration was given to the height of the flue stack as detailed in Appendix 1(2) of the full ES documents. This was to ensure the most efficient dispersion of emissions from the stack and a modelling process was used to determine the height, balancing environmental benefit and financial costs. This indicated that a stack height of 43m achieved effective dispersion.

'Do Nothing' Scenario

In the absence of the development, 72,000 tonnes of timber waste would still need to be managed at an appropriate facility. At the time, there were no comparable energy recovery facilities within the same catchment area having uncommitted capacity to receive waste wood and thus the 72,000 tonnes of timber waste would either be deposited in landfill sites within the region (or indeed further afield), or exported to alternative energy recovery facilities (potentially abroad).

Conclusions

This Non-Technical Summary of the full Environmental Statement has outlined the findings of the environmental impact assessment of the development proposals of the 2015 Application for the Barry Dock Biomass Power facility. The ES reviews the environmental information provided in the planning application, as it stood at the point of submission.

The environmental impact assessment has considered the likelihood of significant environmental effects occurring from the proposed changes upon the Site itself and its surroundings. The environmental issues addressed have been identified through a combination of review of existing studies accompanying the original 2010 Permission and its voluntarily submitted ES, studies supporting the 2015 Application, desk based and site survey work, consultation with the Welsh Assembly Government and other organisations.

The ES has not identified any significant effect from the proposed development. The overall conclusion is that, with the adoption of the mitigation measures embodied within the project design, or imposed through existing planning conditions, any impacts identified can be maintained within acceptable limits.

There are therefore no reasons to suggest that the conclusions of the determination process carried out by the Vale of Glamorgan Council in respect of the 2015 Permission and endorsed by the Welsh Assembly Government in 2015, would have been altered by the carrying out of any additional Environmental Impact Assessment as part of the 2015 Application. This document confirms that the decision making processes followed were appropriate and came to valid conclusions.