



Proposed Biomass Boiler - Intertissue Britton Ferry Paper Mill, Baglan Energy Park

Planning Statement

Prepared for

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APPENDICES (provided as separate files / documents)

Appendix A – Pre-application Advice Request

Appendix B – Pre-application Response

Appendix C – Transport Statement

Appendix D – Air Quality Assessment

Appendix E – Preliminary Ecological Appraisal

Appendix F – Ecological Impact Assessment

Appendix G – Noise Assessment

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LIST OF PLANNING APPLICATION DRAWINGS

Drawing 50795-VE-SW-XX-DR-M-XX01 – PA2: Overall Site / Statutory Plan

Drawing 50795-VE-SW-XX-DR-M-XX02 – PA2: Site Plan

Drawing 50795-VE-SW-XX-DR-M-XX03 – PA1: General Arrangement Plan

Drawing 50795-VE-SW-XX-DR-A-3010 (P7): Proposed Roof Plan

Drawing 50795-VE-SW-XX-DR-A-4001 (P7): Proposed Elevations



1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction

- 1.1.1 This Planning Statement (PS) has been prepared in support of a planning application made by Intertissue Ltd. (the Applicant), part of Sofidel UK, for the development of a biomass boiler at the Britton Ferry Paper Mill, on Baglan Energy Park, in Britton Ferry, Neath.
- 1.1.2 The application site sits wholly within the secure boundary of the existing paper mill site and its location and extent are illustrated on the 'Overall Site / Statutory Plan' which forms part of the planning application drawing package. This application is being made to Neath and Port Talbot County Borough Council (NPTCBC) as the local planning authority (LPA).
- 1.1.3 The planning application is being made in detail and the proposal constitutes 'local' development as defined in the Welsh Government's Development Management Manual,¹ on the basis the proposal would involve the development of less than 1,000m² of new floorspace and the application site area is less than 1 hectare.

1.2 Scheme Context and Overview

- 1.2.1 A key element of the paper mill and paper product manufacturing process is an item of plant known as the 'Yankee dryer'. This dryer is used to remove excess moisture from pulp during the process where it is converted into soft tissue products. The dryer requires steam which is presently generated by way of a natural gas fired boiler. This 10.5MW boiler operates continuously and typically consumes over 5,000,000Nm³ of natural gas annually, equating to circa 11,000 tonnes of CO₂ equivalent.
- 1.2.2 It is proposed to replace the gas fired boiler with the new biomass boiler. This would be fuelled by a maximum of 44,100 tonnes per annum of clean, virgin wood chip. The existing gas fired boiler would be retained and used as back-up boiler. All of the energy generated by the new biomass boiler would be classed as renewable / low carbon. Hence, all of the fossil fuel related CO₂ emissions associated with the standard operation of the gas fired boiler would be displaced.

¹ Section 5 Annex Planning Application Classifications – Thresholds and Criteria

- 1.2.3 As described in greater detail subsequently, the Intertissue Britton Ferry site already benefits from an extant planning permission for a similar biomass boiler scheme which has never been implemented. However, the scheme now proposed has certain differences to that in the extant consent, including its planning application boundary. Consequently, a new planning application is required.

1.3 Scope of the Planning Application

- 1.3.1 The scope and content of the application have been agreed with NPTCBC through a formal pre-application consultation / advice process. The pre-application advice request forms Appendix A to this PS and the LPA's response is contained as Appendix B. The pre-application advice has been fully taken on board and reflected in the submitted application documents.
- 1.3.2 This PS is divided into five main sections. Following on from this introduction, the sections are set out as follows:
- **Section 2.0** provides a description of the application site, its surroundings and its planning history;
 - **Section 3.0** provides a detailed description of the proposed biomass boiler including its benefits;
 - **Section 4.0** provides a summary of the results of the various technical assessments carried out in support of the planning application, which are all appended to this PS, and comprise: a Transport Statement; an Air Quality Assessment, an Ecological Assessment; a Noise Assessment; and a Flood Consequences Assessment.
 - **Section 5.0** sets out the planning policy context and provides a planning appraisal of the proposal.

1.4 The Applicant

- 1.4.1 The Applicant is Intertissue Ltd. whose activities are subsumed into Sofidel UK Ltd. a part of the wider Sofidel Group. Sofidel UK has four production sites. Two integrated plants, one being the Britton Ferry Paper Mill site and another in Leicester (Hamilton Industrial Park), a paper mill at Lancaster and a converting plant in Leicester (Rothley Lodge).



- 1.4.2 The Sofidel Group was founded in 1966 and is one of the largest producers of paper for hygienic and domestic uses (tissue) in the world: toilet paper, kitchen towels, napkins, handkerchiefs and tissues. From its headquarters in Porcari (Lucca, Italy), Sofidel coordinates the activities of 16 companies throughout Europe and the United States, which produce more than 1.4 million tonnes of paper each year and employ more than 6,900 people.
- 1.4.3 Of direct relevance to the current biomass boiler project, Sofidel is fully aware that the paper production process is defined as a high energy consuming activity, which requires significant amounts of energy. To achieve it in an increasingly sustainable manner, Sofidel focuses great attention on the employed energy sources, as well as the energy efficiency of its plants and production processes.
- 1.4.4 Since 2008 Sofidel has made public commitments for the reduction of its greenhouse gas emissions, certifying its inventory of emissions by third-party and independent bodies annually. Over a 12 year period (2009 – 2020), Sofidel invested circa €100 million in cogeneration plants and energy production from renewable sources (photovoltaic and hydroelectric), biomass power plants and energy efficiency. By 2020 the Group had reduced direct emissions of CO₂ into the atmosphere by 24% (reduction in carbon intensity, 2009-2020). In 2022 Sofidel achieved 15.7% reduction in direct CO₂ emissions into the atmosphere (reduction in carbon intensity compared to base year 2018), through energy efficiency measures, the use of cogeneration plants, and the use of renewable energy.
- 1.4.5 As of today, the Group has reduced direct emissions of CO₂ into the atmosphere by 24% (reduction in carbon intensity since 2009).
- 1.4.6 Sofidel's greenhouse gas (GHG) emissions reduction targets (scopes 1 and 2) to 2030 have been approved by the Science Based Targets initiative (SBTi) as consistent with reductions required to keep warming to well-below 2°C, in line with the goals of the Paris Agreement.
- 1.4.7 The delivery of the biomass boiler at the Britton Ferry Paper Mill site will be a key part of delivering the Group's GHG emissions reduction targets.



2.0 THE SITE, ITS CONTEXT AND PLANNING HISTORY

2.1 The Site and its Surroundings

- 2.1.1 The application site for the proposed biomass boiler is 0.256 hectares (ha) in area (2,561m²) and located wholly within the secure boundary of the Intertissue Britton Ferry Paper Mill site. As illustrated on the planning application drawings, the proposed development would be located in the south western part of the paper mill site in an area enclosed (on three sides) by existing buildings, and covered in hard standing.
- 2.1.2 This undeveloped area forms part of the general hard standing around the periphery of the paper mill and is used as external circulation space. Its location has been determined as a result of the need to locate the proposal in close proximity to the building housing the existing gas-fired boiler, whose operation it would replace, and the Yankee dryer.
- 2.1.3 The paper mill is located on Plot 5 of the Baglan Energy Park (BEP), which occupies circa 190 ha of previously developed land associated with the former British Petroleum (BP) Petro-chemicals Complex.
- 2.1.4 The context of the application site can be described as follows:
- NPTCBC's Offices and Service Depot, and the Waterside Medical Practice and Heath Centre are located to the north, beyond which is the River Neath;
 - Brunel Way is located immediately to the east, beyond which are business premises forming part of the wider BEP;
 - An earth landscaping bund (including a belt of semi-mature trees) is located to the south, beyond which are railway lines associated with the neighbouring Baglan Bay Power Station (including associated overhead power lines) and vacant previously developed brownfield land (e.g. other parts of the former BP complex which are being promoted for a range of uses); and
 - A track forming part of the Wales Coast Path is located immediately to the west and northwest, beyond which are sand dunes and salt marshes which in turn give way to the River Neath and Baglan Bay.



- 2.1.5 The paper mill site itself occupies circa 32 ha of land, which was raised to create a level development platform prior to construction. It comprises of a series of large, interlinked buildings which extend to a height of circa 27m (top of cowls on the roof), together with a separate office block and supporting infrastructure that includes a security / weighbridge complex, car parking, a trailer park, internal circulation roads, and drainage infrastructure etc.
- 2.1.6 Access is gained from the roundabout off Brunel Way which in turn provides a connection to the A48 / A474 and ultimately the M4. A road bridge crossing railway line (to the south east of the paper mill site) was completed in April 2015. This forms part of the BEP link road and the Port Talbot to Swansea bus corridor. In addition, the paper mill also benefits from its own railway siding which extend into the buildings.
- 2.1.7 In terms of sensitive receptors, it is judged that the aforementioned Waterside Medical Practice and Heath Centre comprises the closest sensitive receptor, lying circa 600m to the north east of the application site (on the opposite side of the existing paper mill), adjacent to the Council Offices on Plot 6B. In addition, it is noted that a traveller caravan site is located circa 800m from the application site to the north (beyond the Council Offices), with other residential properties located in Baglan (beyond the A48) at a distance of circa 1.1km to the east.

2.2 Relevant Planning History

- 2.2.1 With regard to the paper mill, an outline planning application for the: *“Phased construction of a paper manufacturing and converting plant. Provision of on-site infrastructure, ancillary plant and buildings and associated works including preparatory earthworks.”* was approved in August 2003 (reference: P2003/0457). This was subsequently ‘varied’ in July 2004 (reference: P2004/0539), with a subsequent approval of Reserved Matters, pursuant to the ‘varied’ consent in August 2004 (reference: P2004/0526). Subsequent to these grants, a number of condition discharges were approved including in relation to: the creation of the development platform upon which the paper mill buildings have been constructed; a method statement outlining the provision of pollution prevention measures; drainage infrastructure; external lighting; and external material samples

- 2.2.2 In December 2004, a planning application for the construction of a railway siding, laying of underground utility cables, water main and effluent drain was approved (reference: P2004/1321). In addition, in February 2006, an application was approved to construct two surface water reinforced concrete outfalls and spillways into the River Neath (reference: P2006/0036). This aforementioned infrastructure has been developed and currently supports the paper mill.
- 2.2.3 With regard to the previous biomass boiler proposal, Intertissue (advised by Axis), secured planning permission for a biomass boiler scheme on the Britton Ferry Paper Mill site, on 17th December 2015 (ref: 2015/0975 – the 2015 Permission). Much of the site subject to the 2015 Permission overlaps with the currently proposed biomass boiler site.
- 2.2.4 The 2015 Permission was subject to 6 planning conditions and was set to expire on 16th December 2020. Prior to that date, Sofidel applied under s.73 of The Town and Country Planning Act 1990 (the 1990 Act) to extend the life of the permission. This was approved in 2020 (ref: P2020/0787 – the 2020 Permission), with the effect of creating a new planning permission, unchanged from that granted in 2015, save its expiry date. The new permission now expires on 16th November 2025.
- 2.2.5 Table 1 below outlines the main differences between the biomass plant which is the subject of the 2015 and 2020 Permissions and that now proposed.

Table 1 – Main Comparators Between the Biomass Plant Subject of the 2015 & 2020 Permissions and the Current Proposal

Comparator	Scheme Approved 2015 / 2020	Current Proposal
Location	Adjacent to the southern façade of the paper mill building close to the existing gas fired boiler house.	Adjacent to the southern façade of the paper mill building close to the existing gas fired boiler house.
Building size	The gross external area (GEA) of the buildings was 1,284m ² , with a maximum building height of 19.4m.	The GEA of the buildings is 995m ² , with a maximum building height of 24m
Stack height	30m	30m
Fuel type	Predominantly recovered waste wood (Types A, B and C) supplied in the form of wood chips. However, other biomass fuels	Clean, virgin wood chip.

	including virgin wood and pellets were permissible.	
Maximum fuel throughput	25,000 tonnes per annum (tpa) based on waste wood. However, if 100% virgin wood chip was utilised, the throughput could be as high as 37,200 tpa (worse-case) based upon maximum moisture content.	Maximum 44,100 tpa* (worse-case) based upon maximum moisture content.
Thermal Capacity	Circa 8MW thermal	Circa 9.1MW thermal
Associated HGV movements	Based on 25,000 tpa fuel throughput: - Daily average movements: 10 movements (5 in + 5 out) - Likely maximum daily movements: 16 movements (8 in + 8 out)	Based on maximum 44,100 tpa fuel throughput: - Daily average movements: 18 movements (9 in + 9 out) - Likely maximum daily movements: 26 movements (13 in + 13 out)
Foul and surface water drainage	New infrastructure local to the biomass plant itself, tying into the existing overall drainage systems serving the paper mill site.	New infrastructure local to the biomass plant itself, tying into the existing overall drainage systems serving the paper mill site.

* The reason why the facility would have a similar thermal capacity (13% greater) but potentially combust an additional 19,100 tpa of fuel is entirely related to the moisture content of the wood fuel. Waste wood is almost universally dried / treated resulting in a low moisture content giving a relatively high calorific value (CV) fuel. Conversely, virgin wood chip is by definition untreated, has a higher moisture content and thus a lower CV. As a consequence a greater quantity of fuel throughput is required to operate the plant at its thermal capacity. The 41,100 tpa estimate is based on the lowest predicted CV for the wood chip fuel and thus represents a worse-case (maximum) fuel tonnage.

2.2.6 Based on the foregoing, there is an extant planning permission for a biomass boiler on the Intertissue Britton Ferry Paper Mill site, that is very similar in terms of location, scale and operation to that now proposed.



3.0 THE PROPOSED DEVELOPMENT

3.1 Introduction

- 3.1.1 This section provides a description of the proposed development, together with details regarding its construction and operation.
- 3.1.2 As set out in the introductory section, this application proposes to substitute the existing natural gas fired boiler with a new standalone biomass boiler on the paper mill site. The proposed development would process up to 44,100 tpa of biomass fuel in order to generate steam which would be predominantly used by the Yankee dryer during the paper manufacturing process.
- 3.1.3 For ease of understanding, this section should be read in conjunction with the submitted planning application drawings.

3.2 Description of the Proposed Development

- 3.2.1 The proposed biomass boiler would be fuelled by a maximum of 44,100 tonnes per annum of clean, virgin wood chip, based upon maximum predicted availability of 8,600 hours per annum (i.e. ~98% of the year). The facility would be located within a standalone structure comprising a number of linked or immediately abutting buildings, as described below. The existing gas fired boiler would be retained and used as back-up boiler.

Boiler House Building

- 3.2.2 The main, boiler house building would accommodate the boiler which would produce heat (i.e. steam) only. It would have a thermal capacity of circa 9.1MW. Due to the boiler only producing heat it would be highly efficient (circa 85% efficiency). It would also house a control and electrical room and the transformer.
- 3.2.3 The boiler house would be 24.22m long, 14.9m wide and have a maximum roof height of 24m. It would comprise a steel framed, metal clad building, coloured to match the adjacent, existing paper mill building.

Electrostatic Precipitator and Ash Skips Building

- 3.2.4 Linked to the southern façade of the boiler house would be a building enclosing the electrostatic precipitator and the ash skips. It would be 18.52m long, 9.58m wide and



have a maximum roof height of 14.5m; and again be metal clad in the same colour as the boiler house.

Fuel Handling and Storage Buildings

- 3.2.5 The main fuel handling and storage building would be annexed to the eastern end of the boiler house building. It would be 18.79m long, 18.2m wide and have a maximum roof height of 10m. This building would be fitted with a fully integrated walking floor conveyance system. It would be open fronted and capable of storing 3-days of wood chip. At the rear of the building would be an internal conveyor belt which would transfer the wood chip fuel into the boiler house.
- 3.2.6 Immediately abutting the main fuel handling and storage building, and lying to its east, would be the secondary bulk fuel store. This would be 11.1m long, 10.28m wide and also have a maximum roof height of 10m. It would comprise two storage bays, providing the further 2-days fuel storage. As required, wood chip fuel would be transferred from the bulk fuel store to the main fuel handling and storage building by a front-end loading shovel.

Other Main Infrastructure Items

- 3.2.7 There would also be a new overhead pipebridge, and associated ladder rack, connecting the new boiler to the paper mill. It would comprise of a freestanding steel lattice frame. The bridge would support the pipework associated with the transportation of steam to the Yankee dryer and the return of condensed steam to the boiler house. The pipebridge and ladder rack would be circa 50m long and sit around 5m above ground level.
- 3.2.8 In addition, the flue stack would be located externally, immediately abutting the southern elevation of the boiler house, and a back-up diesel generator would be sited outside the boiler house's north-east corner. This would enable the plant to shut down safely in the event of a site power cut. Finally, there would be a new underground interceptor tank which would handle dirty water associated with the proposal prior to feeding into the paper mill's existing biological wastewater treatment plant.

Main Operations

- 3.2.9 The wood chips would be transported to the site in vehicles (HGVs) such as walking floor trailers, ejector trailers, or tippers. Delivery HGVs would utilise the existing weighbridge and internal traffic system in order to reach the fuel storage building. Based upon the maximum annual throughput it is calculated that the facility would generate an average of 9 HGV trips day (i.e. 18 movements 9 in + 9 out per day), taking account of wood chip delivery and ash removal. It is estimated that the maximum daily number of HGV movements would be between 20 and 26 and that, as per the 2015 / 2020 Permissions, the facility would receive HGV deliveries / collections 278 days (5.5 days per week, minus public holidays) per year. Material would typically be delivered / collected over a daytime period, 08:00-17:00 Monday to Friday and 08:00-13:00 on Saturdays.
- 3.2.10 The wood chip deliveries would typically be unloaded (ejected) within the cover of the main storage area. In the event tipper HGVs are used the wood chip may be tipped immediately in front of the fuel storage building, where loading shovels would feed the wood chips on to the walking floor conveyance system.
- 3.2.11 The fuel storage building's walking floor system would continuously move the fuel towards the conveyor system located towards the back of the building. Fuel would fall via chutes onto a conveyor belt where it would be transported to the combustion unit within the boiler house. It would then be fed into the combustion unit (at a controlled rate) via a feeding system comprising of a hopper, chute and feeding ram arrangement.
- 3.2.12 The combustion system would be based on a moving grate design, where fuel would be moved mechanically by rotating grate elements from the feed zone, through the drying, main combustion, and finally burn out zones. The purpose of the grate is to move / mix the fuel and to distribute primary combustion air evenly across the bed. Bottom ash (e.g. the inert burnt-out residue from the combustion process) would be conveyed off the end of the grate directly in to the covered ash skips, where it would self-cool. The cooled ash would then be transferred off-site for suitable management. Typically less than 25 tonnes of ash would be generated in an operational week.
- 3.2.13 The heat released through the combustion process would be recovered in a conventional steam boiler, which would be integral to the combustion chamber. The



boiler would produce saturated high pressure steam which would be transferred via pipework to the Yankee dryer. In addition, hot gases would also flow through an economiser which would pre-heat boiler feed water to maximise the efficiency of the boiler.

- 3.2.14 The high pressure steam generated by the new boiler would feed into the exiting steam network, from where the vast majority would be used to operate the Yankee dryer within the paper mill. Once spent, the condensed steam would return to a feed water tank before beginning the process again (e.g. a closed circuit pipework system).
- 3.2.15 The gasses generated through the combustion process would be fed into the electrostatic precipitator which would remove dust and smoke etc. The cleaned gases would then be emitted to atmosphere via the stack.
- 3.2.16 General drainage would be provided to serve the inside of the new boiler and fuel storage buildings. These drains would mainly receive dirty water from cleaning of the plant and as such may contain debris, trace oil, and biomass. There are no welfare facilities proposed. The general drainage, together with blow down water (discussed below) would feed into a new underground interceptor tank to remove solids before being conveyed to the site's existing biological wastewater treatment plant.
- 3.2.17 Boiler water drainage and boiler blow down water would be directed to a blowdown vessel located within the boiler house. The boiler blowdown process would be very similar to that used on the existing gas boiler. Its purpose is to remove a small quantity of water from the boiler on a continuous basis to allow water quality to be controlled. As the blowdown water would collect in the blowdown vessel, part of it (approximately 20% of the total blowdown water) would evaporate and emerge as steam at a vent located at the top of the boiler house. The water fraction retained within the blowdown vessel would be at a temperature of 100°C. This water would be cooled by a flow of cooling water (mains cold water) to reduce the boiler blowdown water temperature to 60°C before it would be forwarded to the existing waste water facility. The total water flow to the existing waste water facility would comprise approximately 140 kg/hr of boiler water plus approximately 160 kg/hr of cooling water to give a total discharge of 300 kg/hr. In addition to this, approximately 40 kg/hr of steam would be emitted from the blowdown vent.



- 3.2.18 On occasion it would be necessary to blowdown at a higher rate should boiler water quality be found to have deteriorated. In such a scenario, which should occur no more frequently than once per day as a maximum, the blowdown rate could double for a period of circa 10 minutes. The overall volumes of blowdown water plus cooling water are anticipated to be very similar those associated with the operation of the existing gas boiler.
- 3.2.19 With regard to surface water drainage, the paper mill site benefits from an existing drainage network (including pollution control infrastructure) which directs surface water into purpose built lagoons located on the northern and southern boundaries of the site. The lagoons discharge into the River Neath under an existing discharge consent.
- 3.2.20 The proposed biomass boiler application site comprises existing hardstanding. Thus, the proposal would not increase the area of existing impermeable surfacing on the site, and thus run-off. Surface water arising from the roof and surrounding hard standing would be collected via a new drainage system which would connect to the existing surface water drainage network that supports the site.
- 3.2.21 Once commissioned, the proposal would operate on a near continuous basis. During hours of darkness / low level natural illumination there would be a need for lighting commensurate with health and safety requirements to ensure a safe working environment for operatives. The location of the proposed development means that no light spill would occur beyond the site boundary. However, it is considered that lighting could be controlled by a suitably worded planning condition if deemed necessary.
- 3.2.22 The proposed biomass boiler would be located entirely within the boundary of the paper mill site which already benefits from secure fencing and gating arrangements. Consequently, no additional fencing or security measures are proposed. The paper mill site already benefits from a network CCTV cameras. At this stage it is not clear whether any additional cameras would be required. However, it is considered that these details could be controlled by a suitably worded planning condition if deemed necessary.
- 3.2.23 Intertissue / Sofidel proposes to use existing on-site operations and maintenance teams to run and service the new biomass boiler. However, it is anticipated a new,

part-time specialist maintenance resource will be required. The scheme represents a significant, circa £12.5 million, capital investment in the Britton Ferry site, with further additional circa £0.5 million of annual operational expenditure.

3.3 Construction Phase

- 3.3.1 The current estimated construction period is for circa 12 months and is currently programmed to run between November 2024 to November 2025, with commissioning activities currently estimated to commence in September 2025.
- 3.3.2 It is anticipated that there would be four main construction stages, which in practice would overlap. These would be: ground works (including piling and laying the building slab); civil / structural engineering works (including drainage installation, steel work erection and cladding); installation of plant and mechanical / electrical equipment; and commissioning.
- 3.3.3 It is estimated that the peak number of construction workers on site would be in the region of 40+ during the main construction period, increasing from ~10 at the beginning of the project and ending with ~15 during the commissioning phase.
- 3.3.4 Typical construction hours are proposed to be 07.00 to 18.00 Monday to Friday, with potential for additional weekend working on Saturday and Sunday, between the hours of 07.00 to 17.00, if required.
- 3.3.5 The laydown area, site compound and welfare facilities are intended to be located directly adjacent the construction zone, on the existing vehicle apron / hardstanding area.
- 3.3.6 The construction access would be via the same route as all existing site traffic entering and leaving the paper mill facility; i.e. A48 to Brunel Way and entering the overall site through existing security barriers to the construction area.
- 3.3.7 In terms of construction traffic, it is expected that there would be typically 2-5 regular deliveries per day, with a peak of 10-15 large HGV deliveries per day during peak construction activities.
- 3.3.8 Construction equipment would include mobile elevated working platforms, delivered via HGVs, medium and large format craneage, in the region of 15-100 tonnes, large excavation machines and standard tele-handlers.



Construction Environmental Management Plan

- 3.3.9 A Construction Environmental Management Plan (CEMP) would be developed for the construction period, the purpose of which would be to manage and report environmental effects of the proposed development during construction. The CEMP would set out how environmental issues would be managed in accordance with relevant legislation, regulations and best practice guidance. It would be the responsibility of the main construction contractor to develop and enforce the CEMP.
- 3.3.10 The CEMP would typically cover the following elements: drainage, water quality and hydrology; dust, emissions and odour; noise and vibration; health and safety / site management; construction traffic management; and pollution control and emergency / contingency procedures. Both the 2015 and 2020 Permissions contain a pre-commencement planning condition requiring the submission and approval of a CEMP for the project. It is anticipated a similar condition would be applied to any new permission for the current biomass boiler proposal.

3.4 The Need for the Proposed Biomass Boiler and its Benefits

- 3.4.1 The provision of a near continuous heat source in the form of steam for the Yankee dryer is an essential part of paper product manufacturing, with the dryer being used to remove excess moisture from pulp during the process where it is converted into soft tissue products. At present, the steam for the dryer is generated by way of a natural gas fired boiler. This boiler operates continuously and typically consumes over 5,000,000Nm³ of natural gas annually, equating to circa 10,000 tonnes of fossil fuel derived CO₂ equivalent, based on the latest Government greenhouse gas emission factors.
- 3.4.2 As set out subsequently, the Climate Change Act 2008 (2050 Target Amendment) Order 2019, amended the Climate Change Act 2008 and set a legally binding commitment for at least a 100% reduction of greenhouse gas emissions (compared to 1990 levels) in the UK by 2050. This is otherwise known as the net zero target. In bringing forward the proposed biomass boiler, which would generate 100% renewable energy, Sofidel is making a material contribution towards the national target in line with its own corporate greenhouse gas emissions reduction targets.



- 3.4.3 In short, the new biomass boiler would displace the emission of circa 11,000 tonnes of fossil fuel derived CO₂ equivalent per annum. This represents a significant and tangible environmental benefit.
- 3.4.4 In addition, from a socio-economic perspective and as referenced previously, the scheme represents a significant, circa £12.5 million, capital investment in the Britton Ferry site, with further additional circa £0.5 million of annual operational expenditure. This level of infrastructure investment in the paper mill emphasises the ongoing importance of the site and its circa 300 employees to the Sofidel Group.



4.0 ENVIRONMENTAL AND TECHNICAL MATTERS

4.1 Introduction

- 4.1.1 The range of assessments carried out to understand the potential effects of the proposed biomass boiler development have been informed by the pre-application advice process undertaken with NPTCBC and cognisant of those studies which supported the 2015 biomass boiler application.
- 4.1.2 In addition, regard has been given to the presence of the existing paper mill and its supporting infrastructure on which the biomass boiler would rely. This includes: being located on a remediated brownfield site; being served by existing foul and surface water drainage systems; and sitting within an existing illuminated environment. As such, there has been no further requirement to consider effects related to contaminated land, drainage or lighting.
- 4.1.3 In this context, this section of the PS summarises the findings of the various environmental and technical assessments which have been carried out in support of the planning application and which define the likely environmental effects of the proposed development. These are presented under the following headings:
- Transport Statement;
 - Air Quality Assessment;
 - Ecological Assessment;
 - Noise Assessment;
 - Flood Consequences Assessment; and
 - Landscape, Visual and Heritage Effects.

4.2 Transport Statement

- 4.2.1 A Transport Statement (TS) has been submitted in support of the planning application for the new biomass boiler and is appended to this PS as Appendix C. This describes how the extant 2020 Permission presents the 'fallback' position in planning terms, against which the proposal should be assessed from a traffic generation perspective.
- 4.2.2 Access to the Paper Mill site is taken from a roundabout junction with Brunel Way and Central Avenue, which is located to the northeast of the Paper Mill site. The



existing access arrangements would remain unchanged as part of the new biomass boiler proposal.

- 4.2.3 Personal injury accident (PIA) data has been analysed using Crashmap which indicates that the accident record within the vicinity of the paper mill is not considered to present a material concern in the context of the proposal, with only one 'slight' accident being recorded within 500m of the site between 2018 – 2022 (inclusive).
- 4.2.4 The TS demonstrates that the site benefits from being accessible by the main non-car modes of transport, including on foot, by cycle and by public transport (bus and rail).
- 4.2.5 The TS report sets out the average and maximum vehicle trip generation forecasts associated with the extant 2020 Permission, the current biomass scheme, and the resultant net difference in trip demand. It is concluded that when compared against the **average** trip generation forecasts of the extant 2020 Permission and the Proposed Development, the Proposed Development is forecast to generate a net increase of 8 two-way HGV trips per day and a net reduction in 6 two-way car trips per day, on average. When assessed based on the **maximum** trip generation forecasts of the extant 2020 Permission and the Proposed Development, the Proposed Development is forecast to generate a net increase of up to around 10 two-way HGV trips per day and a net reduction of up to around 6 two-way car trips per day.
- 4.2.6 It is on the basis of the above that it is considered that the Proposed Development would not result in any unacceptable impacts on the safety or operation of the local highway network.

4.3 Air Quality Assessment

- 4.3.1 An Air Quality Assessment (AQA) has been submitted in support of the planning application and forms Appendix D to the PS. The findings of this assessment are summarised below.
- 4.3.2 In relation to the impact on human health:
- i. No exceedance of any Air Quality Assessment Level is predicted.



- ii. All short-term impacts can be screened out as 'negligible' based on results at the point of maximum impact outside of the installation boundary.
- iii. Long-term impacts on concentrations of nitrogen dioxide and particulate matter cannot be screened out based on results at the point of maximum impact outside of the Installation boundary. Further assessment of impacts at areas of relevant exposure has been undertaken. This has concluded that all impacts at areas of relevant exposure will be 'negligible'.

4.3.3 In relation to the impact on ecologically sensitive sites (further referenced below in sub-section 4.4):

- i. The impact on annual mean airborne NOx concentrations is 'not significant'.
- ii. The impact on daily mean NOx concentrations at Crymlyn Burrows biological Site of Special Scientific Interest (SSSI) can be screened out as 'insignificant'. The change in impact at the Baglan Bay Site of Importance for Nature Conservation (SINC) cannot be screened out 'insignificant'; however no exceedance of the most stringent Critical Level is predicted, so no significant effects are anticipated.
- iii. The acid deposition impact at all receptors can be screened out as 'insignificant'.
- iv. The nitrogen deposition impact of Proposed Operation cannot immediately be screened out as 'insignificant' at the Crymlyn Burrows SSSI and at several local nature sites. The significance of effect has been assessed by the ecologist for the project, taking into account the sensitivity of the habitats, the change in impact from the Operational Installation, and baseline concentrations. This has concluded that no significant effects are predicted to occur as a result of operation of the Biomass Boiler.

4.3.4 In summary, the assessment has shown that the operation of the Biomass Boiler would not have a significant impact on local air quality, the general population or the local community. As such there should be no air quality constraint in granting planning consent for the Biomass Boiler.

4.4 Ecological Assessment

- 4.4.1 The planning application is supported by a Preliminary Ecological Appraisal (PEA) report and an Ecological Impact Assessment (EclA) report, provided as Appendices E and F to this PS respectively. The latter also includes, as its Appendix 1, a Green Infrastructure Statement. The findings of each are summarised below.
- 4.4.2 The PEA has not identified any on-site ecological constraints to the proposed development. Its scale and siting, within an unvegetated location within an operational manufacturing site, means that there will be no loss of habitat or risk of disturbance to protected species.
- 4.4.3 The wider surroundings of the site support one biological SSSI and a number of SINC, designated for habitat, botanical, invertebrate and bird interest. The PEA has considered potential indirect ecological impacts on these features as a consequence of the proposed development and further ecological assessment was determined to be required in relation to the following potential impacts:
- Emissions to air, and potential effects on sensitive habitats; and
 - Noise impacts, and potential effects on birds, particularly with respect to Baglan Bay SINC.
- 4.4.4 These are considered in more detail in the EclA, based on the results of dispersion and deposition modelling undertaken in the Air Quality Assessment (AQA), and noise modelling undertaken in the Noise Assessment, as summarised below.
- 4.4.5 In terms of air quality impacts, one statutory designated site, Crymlyn Burrows SSSI, is located within the screening radius for medium combustion plants of the planned output of the proposed development. Sand-dune habitats with a high sensitivity to nitrogen deposition were confirmed as a notified feature of this site, and defined the lowest critical load to use in the impact assessment.
- 4.4.6 Air quality impacts predicted by the AQA on the SSSI can be regarded as inconsequential, being well below screening thresholds. This conclusion is based on precautionary assumptions, including the presence of the most sensitive notified features at the point of maximum impact, and the operation of the biomass boiler in combination with the gas-fired boiler it is essentially designed to replace. There is

- therefore no risk of damage to the SSSI as a consequence of the Proposed Development.
- 4.4.7 The AQA does not predict any significant impacts on locally designated sites as a consequence of the proposed development.
- 4.4.8 With noise effects, potential noise impacts on short-eared owl, a qualifying bird species of a nearby locally designated site, Baglan Bay SINC, were assessed.
- 4.4.9 The Noise Assessment predicts maximum increases in operational phase sound pressure levels of 1dB(A) at the SINC boundary, 20m from the existing Sofidel site boundary. These values can be safely regarded as inconsequential.
- 4.4.10 Baseline measurement of peak sound levels indicates significant habituation is likely in lapwing, a regionally important bird species present in the SINC. Construction noise peaks are not predicted to exceed baseline values, and will remain below the 72dB(A) threshold value at the bird. Disturbance due to sudden construction-phase noise is therefore very unlikely to occur.
- 4.4.11 In terms of the Biodiversity and Resilience of Ecosystems Duty, the proposal fully accords with DECCA principles – i.e. that:
- Diversity - no loss of habitats or populations of species is predicted;
 - Extent - no change in habitat extent is predicted;
 - Condition - no negative impact on habitat condition is predicted;
 - Connectivity - no negative impact on functional habitat and ecological networks is predicted;
 - Adaptability to Change - through avoiding any impact on extent, condition and connectivity of habitats, features and ecological networks, no impact on adaptability to change is predicted.
- 4.4.12 There is therefore no requirement for ecological mitigation, as the proposed development avoids any damage to habitats or to the connectivity of ecological networks, and would not result in any indirect impacts on habitats in the wider vicinity.
- 4.4.13 The requirement for ecological enhancement is implemented in the Green Infrastructure Strategy (see Appendix 1 to the EclA). This proposes a proportionate

enhancement of bird habitat on the boundary of the Sofidel site and Baglan Bay SINC, through construction of two pole mounted barn owl nest / roosting boxes.

4.5 Noise Assessment

- 4.5.1 A Noise Assessment has been submitted in support of the planning application and forms Appendix G to the PS. The findings of this assessment are summarised below.
- 4.5.2 The primary objection of the noise assessment is to determine the noise impact at the nearest sensitive receptors (NSRs) in relation to the proposal.
- 4.5.3 Noise levels have been considered and assessed during the construction and operational phases of the biomass boiler. Relevant and appropriate noise guidance and standards have been used to determine the noise impact and where appropriate amelioration measures provided to mitigate noise sources to acceptable and reasonable levels.
- 4.5.4 To determine any likely impact from noise it was necessary to establish typical baseline sound levels in the vicinity of NSRs. This information has helped determine any likely noise impact on NSRs during the operation of the proposed development.
- 4.5.5 The study benefits from a baseline sound study and the results of baseline sound measurements taken at NSR monitoring positions indicate that representative background sound levels during the daytime period (0700-2300 hours) range between 48dB and 56dB L_{A90} [54dB to 61dB L_{Aeq}]. The higher daytime background sound levels occur where NSRs are closer to the local road network. During the night-time monitoring period (i.e. 2300-0700 hours) results show background levels to range between 39-46dB L_{A90} [50dB to 56dB L_{Aeq}].
- 4.5.6 The Applicant has extant planning permission for a similar development, which was originally submitted and approved in 2015 (planning ref. P2015/0975 dated 17th December 2015) and then 'extended' via a subsequent application under s.73 of The Town and Country Planning Act 1990, resulting in the extant permission granted in 2020 (planning ref: P2020/0787). The methodology and noise criteria agreed with the Public Protection Officers at the Environmental Health Department at Neath Port Talbot CBC at the time has been followed (with the inclusion of any updates on NSRs, locations for monitoring and noise standards or guidance). The Officer's advised in 2015 that the assessment should consider BS4142 in terms of noise

criteria at the nearest residential properties and BS8233 in relation to nearest commercial receptors to the site.

4.5.7 The impact of site operational noise at the NSRs to the north, east and south directions from site has been assessed. Additional noise predictions relative to ecological sensitive receptors to the west within the Baglan Bay SINC (Site of Importance for Nature Conservation) has also been included in the assessment.

4.5.8 The report predicts the impact of noise from the operation of the biomass boiler and associated plant on site, which would generally be contained within purpose-built buildings and fuel storage and transfer plant mounted external to the buildings. The noise assessment concludes the following:

- Noise levels from site operations have been undertaken using a noise prediction calculation model, internationally recognised calculation standard with appropriate input settings and plant noise limit data from the technology provider.
- The highest predicted noise levels from site operations are shown to be well below established background sound levels measured during a weekend period to determine the lowest likely levels.
- The highest predicted noise levels from site operations would not increase existing residual sound levels measured in terms of L_{Aeq} .
- According to BS4142:2014+A1:2109, the assessment of highest likely site operational noise levels would indicate that impact is low. This includes a +3dB allowance for noise character in accordance with NRW guidance on design for new development.
- Site noise levels would be within all relevant guidance and standards for noise (i.e. would be below night-time noise level according to WHO guidance, below recommended internal noise levels according to BS8233: 2014 and sleep disturbance criteria in terms of L_{Aeq}).
- Noise levels predicted at nearest commercial receptors (i.e. offices) is shown to be well within a reasonable design range for an office environment according to BS8233: 2014.
- The results show that the predicted site operational noise level would only increase existing ambient noise levels at Baglan Bay SINC ecological receptors by up to +1dB(A). This is not significant according to the advice provided within

the ecological assessment report, which sets a precautionary limit of +3dB above ambient levels for birds.

- The impact of site operational noise or the proposed and existing Intertissue Ltd plant have been assessed and would not exceed background sound levels and not increase existing residual L_{Aeq} levels and therefore there is no significant cumulative impact.
- Best Available Techniques (BAT) would be applied in relation to the plant design, operation and site noise management.
- Assessment of construction noise indicates that there would not be any significant impacts and residual sound levels are unlikely to increase.
- No significant impacts are likely to occur as a result of additional vehicle movements as a result of the development as these will be negligible in context with the existing baseline traffic flows on the local road network.
- No significant impacts are predicted in relation to construction vibration or operational vibration and levels at nearest commercial premises are not expected to reach perceptible levels.
- The results of construction noise at the ecological receptor (i.e. bird species) show noise levels would be at or below the existing ambient levels. The only marginal increase above existing levels at close proximity to the Site boundary shows the maximum construction noise would only exceed the measured ambient levels by +1dB(A). This is therefore not a significant increase and according to the Ecological Assessment report which advises any increase that is below +3dB above the existing ambient, are considered to be inconsequential.
- In terms of L_{Amax} levels, the construction levels would be not significant at ecological receptors based on predicted levels and existing daytime ambient levels that are higher. The levels would be below the threshold and advice provided by the Ecological Assessment for Lapwing disturbance.

- 4.5.9 Noise amelioration measures to control site operational noise have been proposed to meet the requirements of best available techniques (BAT).

4.6 Flood Consequences Assessment

- 4.6.1 A Flood Consequences Assessment has been submitted in support of the planning application and forms Appendix H to the PS. The conclusions of this assessment are summarised below.



- 4.6.2 The application site is located within Flood Zone B on the Welsh Government Development Advice Map – an area known to have been flooded in the past evidenced by sedimentary deposits. The Natural Resources Wales (NRW) ‘Flood Map for Planning’ shows that the site is located within an area outside of the extreme flood extent (Flood Zone 1), meaning it has a less than 0.1% annual probability of flooding from rivers and the sea, including the effects of climate change.
- 4.6.3 Modelled outputs for the River Neath and its tributaries have been obtained from NRW and shows that the site is flood free during all events up to and including the undefended 0.1% AEP plus CC (year 2116) event. The risk of flooding from all sources has been assessed and the flood risk to the site is considered to be very low.
- 4.6.4 No flood risk mitigation measures are considered necessary.

4.7 Landscape, Visual and Heritage Effects

Landscape and Visual Effects

- 4.7.1 This sub-section briefly assesses the likely landscape and visual effects of the biomass boiler proposal. It also evaluates the potential effects on the setting of designated heritage assets. Whilst it is acknowledged that absence of visual impact does not fully correlate to an absence of harm on the setting of a heritage asset, it is judged in the context of the Britton Ferry Paper Mill site, the wider Baglan Energy Park and the intervening distances to heritage assets, that in this case, visual effects are a strong proxy for understanding heritage harm.
- 4.7.2 The proposed biomass boiler development would comprise a series of linked / abutting buildings with a maximum roof height of 24m above ground level, with a stack height of 30m above ground level. The total new floor space created, which also equates to the buildings’ footprint, would be 982.5m². It would be enveloped on three sides by the existing mill buildings which have a roof height 24.4m above ground level to the north, and 12.55m to the east and west. The existing mill buildings have a footprint of circa 80,000m².
- 4.7.3 To the south, the proposed development would front onto the remainder of the Baglan Energy Park (BEP) area, including the existing power station, but would be

separated from the wider Park by the existing landscaped screening bund at the edge of the paper mill site.

- 4.7.4 The wider BEP area is a large brownfield site (former petro-chemical works) located on the coast north of Port Talbot, and which is subject to ongoing extensive redevelopment. There are a series of industrial and commercial developments located on the BEP (including the paper mill), with several vacant plots also present. The existing power station is a notable presence by virtue of its tall, bulky stack.
- 4.7.5 As such, the landscape and visual context within which the proposed development would sit, would be one of extensive built development, both within the BEP area and within the wider corridor of urban development extending along the M4 from Port Talbot to Swansea. In such a context, the presence of the proposed biomass plant, which would form part of an existing industrial operation and would be a similar size and scale to existing buildings at the paper mill site, would be unremarkable. The landscape and seascape of the area is already characterised by extensive urban and industrial buildings / structures.
- 4.7.6 It is wholly reasonable to assume, and consistent with NPTCBC's Baglan Energy Park Development Framework Supplementary Planning Guidance, that currently undeveloped plots within the BEP will be subject to development proposals in the future. It is also reasonable to assume that some proposals will relate to manufacturing or energy generation developments (based upon the development zones set out in the SPG) and may therefore include large-scale structures. It is likely therefore that the existing influence of industrial development upon landscape / seascape character and upon views would intensify regardless of the presence / absence of the proposed biomass boiler.
- 4.7.7 The proposal would be intermittently visible from stretches of the Wales Coastal Path, which skirts the southern and western boundaries of the wider BEP area, but would always be viewed in the context of other existing development present. A similar pattern of visibility would occur from the residential properties at the north-western edge of Port Talbot. In both cases, potential future development in vacant plots may provide additional screening of views. Occasional views would also be available from elevated inland vantage points, such as the footpaths on Mynydd Dinas (east of Port Talbot), set in the context of expansive views across Swansea Bay that include extensive urban and industrial development.

- 4.7.8 To conclude it is clear that the presence of the proposed biomass boiler would have only a very limited influence on its surroundings, and would not result in significant landscape (including seascape) and visual effects.
- 4.7.9 This conclusion must also be viewed in the context of the extant 2020 Permission for a similar biomass boiler in a similar location. The extant permission provides for a development with a larger footprint (1,284m²), the same 30m stack height and a slightly lower maximum roof height, being 19.4m above ground level. It is judged that the overall limited landscape and visual effects of the current proposal, would not be materially different to those associated with the scheme approved in 2015 and 2020, whose effects were considered acceptable by the Council.

Heritage

- 4.7.10 From a heritage perspective, four designated assets have been identified within the context of the paper mill site. These include 3 listed buildings / structures which are located to the north and north east of the paper mill. The first being the grade II listed structure known as the “North jetty of outer tidal basin at Briton Ferry Docks” (ref: 23311), which is located circa 500m north on the eastern bank of the river Neath.
- 4.7.11 A further grade II listed building known as the “Hydro-accumulator tower at Briton Ferry Docks” (ref: 23298) is located circa 775m north east, standing on the south eastern flank of the dock at the junction of the dock and outer basin.
- 4.7.12 The third listed structure is the grade II* asset known as the “dock walls and gate between the inner dock and outer basin at Briton Ferry Docks” (ref: 23299), which is located circa 850m northeast on the south side of the elevated M4, 400m east of the river Neath.
- 4.7.13 The final designated asset is a schedule monument known as the “Briton Ferry Dock Entrance” (ref: GM445) which is located circa 750m north east of the paper mill. This encompasses an area of approximately 0.5 ha, with the aforementioned Hydro-accumulator tower located within the boundary of the monument.
- 4.7.14 All of these assets lie to the north / north east of the paper mill, thus the existing paper mill buildings sit between the assets and the proposed biomass boiler. Further, other developments within the BEP area are also present as intervening features

including: the Council offices and depot; the Britton Ferry Heath Centre; and several other commercial premises.

- 4.7.15 Given the highly developed context of the area, the distances between the application site and the assets, and above all the presence of large scale intervening built features, it is concluded that there would be no material effects on the setting of the designated assets and no heritage harm.

4.8 Summary

- 4.8.1 A comprehensive set of environmental / technical assessments have been prepared in support of the proposed development. These assessments have been undertaken in accordance with advice provided in the pre-application response. The conclusions of these assessments do not identify that there would be any likely significant effects or other impacts which would warrant planning permission being refused.
- 4.8.2 Further, the predicted effects do not materially differ from those assessed for the biomass boiler scheme approved under the extant 2020 Permission, and would actually be reduced in terms of the range of pollutants that would be emitted aurally.

5.0 PLANNING POLICY CONTEXT AND APPRAISAL

5.1 Introduction

- 5.1.1 This section undertakes an appraisal of the Proposed Development in the context of the current and emerging planning policy framework.

Development Plan

- 5.1.2 Section 38(6) of the Planning and Compulsory Purchase Act 2004 (PCPA) requires applications to be determined in accordance with the Development Plan unless material considerations indicate otherwise.
- 5.1.3 With regard to the development plan, this comprises the Neath Port Talbot CBC Local Development Plan (2011-2026) (January 2016) (the LDP). Within the LDP, Policy EC2/6 'Baglan Energy Park' identifies the Sofidel Baglan production site as falling within an area indicated as being safeguarded for employment uses.
- 5.1.4 LDP Policy EC 3 Employment Area Uses states that: *"Within allocated and existing employment areas, unless otherwise specified and where appropriate, uses will be restricted as follows:*
- *Uses within classes B1, B2 and B8;*
 - *Ancillary facilities or services which support and complement the wider role and function of the primary employment use; ..."*
- 5.1.5 The broader objectives of the LDP include the following of direct relevance to the proposal:
- *"OB 1: Minimise the causes and consequences of climate change through reduced greenhouse gas emissions and adapt to climate change through consideration of its effects in the design and location of new development.*
 - *OB 11: To promote and protect a diverse portfolio of employment land and employment opportunities to meet the needs of residents and businesses and stimulate economic growth.*

- *OB 12: Improve and strengthen the economic base of Neath Port Talbot to increase economic activity, reduce the unemployment rate in line with the Welsh average and negate some of the impacts of a reduced working age population.*
- *OB 19: To make a proportionate contribution towards the energy needs of Wales with a focus on renewable energy”.*

5.1.6 It is also considered that the following policies within the LDP are of relevance:

- Policy SP 1 Climate Change;
- Policy SP 4 Infrastructure;
- Policy SP 5 Development in the Coastal Corridor Strategy Area;
- Policy SP 11 Employment Growth;
- Policy SP 15 Biodiversity and Geodiversity;
- Policy EN 6 Important Biodiversity and Geodiversity Sites;
- Policy SP 16 Environmental Protection;
- Policy EN 8 Pollution and Land Stability;
- Policy SP 18 Renewable and Low Carbon Energy;
- Policy RE 1 Criteria for the Assessment of Renewable and Low Carbon Energy Development;
- Policy TR 2 Design and Access of New Development;
- Policy SP 21 Built Environment and Historic Heritage; and
- Policy BE 1 Design.

Material Considerations

5.1.7 There is no strict definition of what constitutes a ‘material consideration’ in planning legislation, although case law indicates that any consideration, which relates to the use or development of land is capable of being a material consideration in the determination of a planning application.

5.1.8 Such considerations can include a site’s planning history, emerging local development plan policies, local Supplementary Planning Guidance (SPG), or area planning initiatives, and national government planning policy. In terms of the latter, Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs),

Welsh Government Circulars, and policy clarification letters, which together with PPW provide the national planning policy framework for Wales.

- 5.1.9 At a national level there is also a range of wider strategy / policy, such as in relation to climate change and energy.
- 5.1.10 In the case of the planning application supported by this PS, arguably the principal material planning consideration relates to the relevant planning history. In short, and as described in greater detail in sub-section 2.2 previously, the paper mill site already benefits from planning permission for a biomass boiler scheme granted via the 2015 and 2020 Permissions (the latter being extant). Much of the site subject to the 2020 Permission overlaps with the currently proposed biomass boiler site and, in overall terms, the two proposals are very similar and both designed to fulfil the same function. The main point of difference is that the scheme approved under the 2020 Permission allowed the combustion of waste wood; whereas the current proposal would only combust clean, virgin wood chip, and hence give rise to a far more limited range of pollutant emissions.
- 5.1.11 With regard to emerging development plan policy, the Replacement Local Development Plan (RLDP) 2023-2038 remains at a fairly early stage with work having been undertaken in relation to the evidence base, but with no Draft Preferred Strategy having been published. As such, this is not referred to further.
- 5.1.12 In terms of the wider local planning context, the following are also of relevance:
- i. The Baglan Energy Park Development Framework Supplementary Planning Guidance (SPG - October 2016): The application site is located within the defined Baglan Energy Park, to which this SPG applies. This highlights that the aforementioned LDP Objectives OB11 and 12 are specifically relevant and locates the Intertissue / Sofidel site in Development Framework: Zone1 which is considered to be an appropriate location for high value business development and knowledge and innovation-based industries.
 - ii. The Port Talbot Waterfront Enterprise Zone: This is recognised as a base for a number of major international manufacturing companies. There is also a Port Talbot Waterfront Enterprise Zone Strategic Plan 2018 – 2021.

- iii. Renewable and Low Carbon Energy Supplementary Planning Guidance (July 2017): This document is supportive of all renewable energy development whilst recognising the need to balance provision with protecting the environment and safeguarding the amenity of local residents. Appendix B recognises that energy generation from biomass combustion is a renewable form of energy.

5.1.13 In terms of national planning policy and guidance, Planning Policy Wales (PPW) – Edition 12 (2024) sets out national planning policy across all development sectors and for the protection of all facets of the environment. It states that the primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales. Of particular note:

- i. Section 5.7 states that:
 - a. “Low carbon electricity must become the main source of energy in Wales. Renewable electricity will be used to provide both heating and transport in addition to power. The future energy supply mix will depend on a range of established and emerging low carbon technologies....
 - b. “The benefits of renewable and low carbon energy, as part of the overall commitment to tackle the climate emergency and increase energy security, is of paramount importance....”
- ii. Section 5.9 highlights the Welsh Government's commitment to renewable energy, and states: *“Local authorities should facilitate all forms of renewable and low carbon energy development and should seek cross-department co-operation to achieve this. In doing so, planning authorities should seek to ensure their area’s full potential for renewable and low carbon energy generation is maximised and renewable energy targets are achieved. Planning authorities should seek to maximise the potential of renewable energy by linking the development plan with other local authority strategies, including Local Well-being plans and Economic / Regeneration strategies”.*

- 5.1.14 In addition, the wider policy context contains a significant range of policy and strategy documents relating to climate change and energy, and supporting the deployment of new renewable energy generating infrastructure. This includes, but is not limited to:
- The Climate Change Act 2008 (2050 Target Amendment) Order 2019;
 - Net Zero Strategy: Build Back Greener (2021);
 - British Energy Security Strategy (2022);
 - National Policy Statements (NPS) on energy; specifically the new NPS's EN-1 and EN-3, which came into force on 17th January 2024;
 - State of Natural Resources Report for Wales (2020); and
 - Prosperity for All: A Low Carbon Wales (2019).
- 5.1.15 Each is briefly referenced further below:
- 5.1.16 Climate Change Act 2008 (2050 Target Amendment) Order 2019: The Climate Change Act 2008 set a legally binding target for the UK to achieve an 80% reduction in greenhouse gas emissions by 2050, from the 1990 baseline. However, the UK Government decided that this legally binding target was not ambitious enough to mitigate the nation's activities on climate change. In 2019 the UK Government became the first major economy in the world to pass laws to end its contribution to global warming by 2050, compared to the 1990 baseline.
- 5.1.17 On 12th June 2019, the Government laid the draft Climate Change Act 2008 (2050 Target Amendment) Order 2019 before Parliament to amend the Climate Change Act 2008 by introducing a target for at least a 100% reduction of greenhouse gas emissions (compared to 1990 levels) in the UK by 2050. This is otherwise known as the net zero target. The draft order amended the 2050 greenhouse gas emissions reduction target in the Climate Change Act from at least 80% to at least 100% thereby constituting a legally binding commitment to end the UK's contribution to climate change.
- 5.1.18 At the time the legislation was enacted the UK had already reduced emissions by 42% while growing the economy by 72%. However, the new target requires a significant increase in renewable energy, development of carbon capture and storage technology, construction of new nuclear generation, and a transition to hydrogen and electric for heating and transport.

- 5.1.19 On 20th April 2021 the UK government announced that it would set in law a more ambitious target of cutting carbon emissions by 78% by 2035 compared to 1990 levels. This was in response to the UK's Sixth Carbon Budget from the Climate Change Committee and signals the Government's acceptance of the recommendations and commitment to carbon emission reductions.
- 5.1.20 It is clear from the Government's legally binding commitment to net zero by 2050 and recent announcement that significant new investment will be required in renewable energy projects across the UK to deliver these ambitious objectives.
- 5.1.21 Net Zero Strategy: Build Back Greener (2021): The Government published the 'Net-Zero Strategy: Build Back Greener' in October 2021. The Strategy sets out policies and proposals for decarbonising all sectors of the UK economy to meet the net-zero target and keep us on track for future carbon budgets.
- 5.1.22 British Energy Security Strategy (2022): The British Energy Security Strategy was published in April 2022 in response to rising global energy prices, provoked by surging demand after the coronavirus pandemic as well as Russia's invasion of Ukraine. The strategy will be central to weaning Britain off fossil fuels, which are subject to volatile gas prices set by international markets. The strategy aims to boost sources of homegrown energy for greater energy security in the long term. The strategy signals a significant investment in new renewable energy generation.
- 5.1.23 National Policy Statements on Energy: The new National Policy Statements (NPS) EN-1 and EN-3 came into force on 17th January 2024 and relate directly Nationally Significant Infrastructure Projects (NSIPs) in the energy sector. In short, they ramp up the policy support for new renewable energy projects to a previously unprecedented level. NPSs can be a material planning consideration in decision making on applications that fall under the Town and Country Planning Act 1990.
- 5.1.24 The policy message in EN-1 is very clear:
- "2.3.3 Our objectives for the energy system are to ensure our supply of energy always remains secure, reliable, affordable, and consistent with meeting our target to cut GHG emissions to net zero by 2050, including through delivery of our carbon budgets and Nationally Determined Contribution. This will require a step change in the decarbonisation of our energy system."*



2.3.4 Meeting these objectives necessitates a significant amount of new energy infrastructure, both large nationally significant developments and small-scale developments determined at a local level. This includes the infrastructure needed to convert primary sources of energy (e.g. wind) into energy carriers (e.g. electricity or hydrogen), and to store and transport primary fuels and energy carriers into and around the country.....

2.3.5 The sources of energy we use are changing. Since the industrial revolution, our energy system has been dominated by fossil fuels. That remains the case today. Although representing a record low, fossil fuels still accounted for just over 76 per cent of energy supply in 2020. We need to dramatically increase the volume of energy supplied from low carbon sources”.

- 5.1.25 On this basis, EN-1 describes that the Government has therefore concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure. It then goes on to describe that energy generation through biomass combustion (with or without carbon capture) is low carbon generation; and thus is considered CNP infrastructure. It then identifies that the starting point for all CNP applications is that they get substantial weight in terms of need.
- 5.1.26 State of Natural Resources Report for Wales (2020): The second State of Natural Resources Report (SoNaRR) was published in 2020 as required under the Welsh Environment Act 2016. The report builds on a number of Welsh, UK and global assessments of the status and trends of natural resources. It looks at risks that are currently posed to the ecosystems and to the long-term social, cultural and economic well-being of Wales, as set out in the Well-being of Future Generations (Wales) Act 2015.
- 5.1.27 One of the key messages of the SoNaRR is that the global energy system is one of the main drivers of the climate emergency, and that the transition to renewable energy sources is both vital and inevitable for sustainable development. It emphasises that the consistent availability of renewable energy is a central goal of sustainable energy concepts, alongside energy efficiency and sufficiency.
- 5.1.28 Prosperity for All: A Low Carbon Wales (2019): This Plan sets out the Welsh Government’s approach to cut emissions and increase efficiency in a way that maximises wider benefits for Wales, ensuring a fairer and healthier society. It sets

out 100 policies and proposals that directly reduce emissions and support the growth of the low carbon economy. Policy 31 – Delivery of our Renewable Energy Targets aims to accelerate the deployment of renewable generation by “supporting the development of energy planning at the local and regional level”.

5.2 Planning Policy Appraisal

- 5.2.1 The following sub-section appraises the proposed biomass boiler development against the relevant policies of the LDP and the identified material planning considerations.

Development Plan

- 5.2.2 The relevant policies in the LDP are identified in sub-section 5.1 above.
- 5.2.3 With regard to Policy SP 1 Climate Change, the proposal would directly contribute towards addressing the 4th cause of climate change, in that it would provide an appropriate contribution to renewable and low carbon energy generation. Further, with regard to the listed consequences of climate change, it would not be at risk of flooding. Accordingly, the scheme complies with the policy.
- 5.2.4 In terms of Policy SP 4 Infrastructure, the proposal would constitute new energy generating infrastructure which, by virtue of it comprising renewable energy generation, would better serve the Britton Ferry Paper Mill site, whilst ensuring there would be no detrimental effects on the area and community. Thus, the policy objective would be met.
- 5.2.5 With regard to the LDP’s area based policies, the proposal would be consistent with Policy SP 5 in that it would represent development in the Baglan Bay Strategic Employment Site and help support (safeguard) an existing employment use.
- 5.2.6 With regard to the LDP topic based policies, and specifically those relating to the economy, the proposal would support an important existing employment development (i.e. the Britton Ferry Paper Mill site) located within the existing, and safeguarded, Baglan Energy Park employment area. Thus, it would be consistent with the provisions of SP 11 and EC 2.
- 5.2.7 Further, for the purposes on Policy EC 3 Employment Area Uses, it would comprise and ancillary facility which would support and complement the function of the paper

mill within the primary employment use. In doing, this PS demonstrates that the proposal would not cause any adverse impacts on the overall function of the employment area and neighbouring commercial and residential properties; can be sustainably justified in its location and is appropriate in scale and form to the role and function of the employment area. Accordingly, the proposed biomass boiler is in full accordance with Policy EC 3.

5.2.8 With regard to environmental protection policies:

- i. By virtue of the findings set out in Appendices E and F and sub-section 4.4 of this PS, the proposal would not have any significant or unacceptable effects on important habitats or species including Internationally and Nationally designated sites within the County Borough, specifically Special Areas of Conservation / Ramsar Sites, Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs), nor would such effects occur in relation to local sites. As such, the proposal complies with Policies SP 15 and EN 6.
- ii. As set out in Appendices D, G and H, and corresponding sub-sections 4.1, 4.3, 4.5 and 4.6 of this PS, the proposal would be located on previously developed brownfield land and would not give rise to any unacceptable effects with regard to air pollution, noise pollution, light pollution, contamination, or effects on the water environment. As such, it would accord with the requirements of Policies SP 16 and EN 8.
- iii. By virtue of the findings set out in Appendix C and sub-section 4.2 of this PS, the proposal would not compromise the safe, effective and efficient use of the highway network and would not have an adverse impact on highway safety or create unacceptable levels of traffic generation. Further, the scheme would not affect existing operational staffing levels on-site and thus new parking or travel requirements do not apply. Finally, the paper mill's existing infrastructure and routeing arrangements are fully adequate to cater for the limited new HGV movements. As such, the proposal complies with Policy TR 2.
- iv. As described in sub-section 4.7 previously, the built environment and all relevant heritage assets would be adequately protected and the proposal

would result in no negative effects in this regard. As such, it would be in compliance with Policies SP 21 and BE 1.

- 5.2.9 With regard to policies specifically related to renewable and low carbon energy development, the proposed biomass boiler would deliver new infrastructure for the generation of 100% renewable energy (and thus low carbon energy). Thus it would benefit from the specific support for such proposals embodied in Policy SP 18. Further, it would not have an unacceptable impact on the environment, amenity of local residents, or local highway safety. In addition, it has been sited to minimise impacts on visual amenity. As such, it fully accords with the further provisions of Policy SP18 and the requirements of Policy RE 1.

Material Planning Considerations

- 5.2.10 The proposal is consistent with the provisions of local planning guidance including The Baglan Energy Park Development Framework and Renewable and Low Carbon Energy SPGs; and fully compatible with The Port Talbot Waterfront Enterprise Zone.
- 5.2.11 From a national perspective, the deployment of new renewable energy generation capacity and direct replacement of the ongoing use of a fossil fuel generation plant, within a suitable location and with no material adverse environmental effects, is fully aligned with all national energy, renewable energy and climate change policy. The project will deliver a tangible reduction in fossil fuel derived CO₂ emissions and should thus gain further support from the various policy, strategy and guidance documents which have been identified.

5.3 Findings and Conclusions

- 5.3.1 In terms of the development plan, specifically the NPTCBC LDP, the preceding analysis shows that the Britton Ferry Paper Mill biomass boiler proposal would be in compliance with, or not result in any breach of, all relevant planning policies.
- 5.3.2 Thus, in accordance with Section 38(6) of the Planning and Compulsory Purchase Act, planning permission should be granted unless material considerations indicate otherwise.
- 5.3.3 A range of material planning considerations have been identified, not least of which is the existence of the 2020 Permission for a very similar development proposal. Following high level analysis, it has been shown that delivery of the proposed



biomass boiler would be in compliance with the objectives of a wide range of other national and local policy and strategy documents.

- 5.3.4 No material planning considerations have been identified that weigh against the proposal, nor have any such considerations been identified which would indicate that the planning application should be determined other than in accordance with the development plan; indeed they reinforce the logic for doing so. Accordingly, it is concluded that planning permission should be granted.