

TIMBER PROJECT SUPPLY CHAIN FEASIBILITY STUDY

CAERPHILLY COUNTY BOROUGH COUNCIL

CONFIDENTIAL



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Caerphilly County Borough Council

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TABLE OF CONTENTS

1	EXECUTIVE SUMMARY	1
2	INTRODUCTION	2
2.1	Background	2
2.2	Aims of the Study	2
3	POLICY FRAMEWORK	3
3.2	Regional Strategic Frameworks – Blaenau Gwent Single Integrated Plan (SIP) 2013-2017	4
3.3	Rural Development Plan for Wales 2014-2020 (RDP)	4
3.4	Timber Business Investment Scheme	5
4	METHODOLOGY	6
4.1	Data Collection	6
4.2	Analysing the Data	6
5	BUSINESS PARTNERSHIPS AND SHORT SUPPLY CHAINS.....	7
5.2	Challenges and Opportunities.....	9
6	STRENGTHS WEAKNESS OPPORTUNITIES AND THREATS ANALYSIS	18
6.1	SWOT Analysis	18
6.2	Case studies – Successful TIMBER YARDS / operations.....	20
6.3	Lessons learned.....	22
7	ADDITIONAL INFORMATION	23
8	CONCLUSIONS	24
8.1	introduction.....	24
8.2	Option 1 - Scottish Woodlands Model:.....	24
8.3	Option 2 - National Trust Model:	24
8.4	Option 3 - Hybrid model:	24
8.5	Option 4 - Closure:	25
8.6	Next Steps.....	25

1

EXECUTIVE SUMMARY

1.1.1

This market testing brief has been commissioned by Caerphilly County Borough Council in order to independently establish potential Business Partnerships and Short Supply Chain opportunities for the Timber Project based at Aberbargoed in Caerphilly County Borough.

2 INTRODUCTION

2.1 BACKGROUND

- 2.1.1 WSP | Parsons Brinckerhoff have been commissioned by Caerphilly County Borough Council to complete an independent feasibility study to establish the potential supply chains and business partnerships available to the Timber Project based at Aberbargoed. The Project has been funded through the Welsh Government Rural Communities – Rural Development Programme 2014-2020 (RDP) which is jointly funded by the European Agricultural Fund for Rural Development and the Welsh Government.
- 2.1.2 The Timber Project is based at an industrial estate in Aberbargoed, the project has a range of equipment and machinery required to process timber from its raw state to final product standard including an industrial oven, a Unimog, a fork lift truck, a tipper lorry and a range of industrial sawing and timber conversion equipment.

2.2 AIMS OF THE STUDY

- 2.2.1 This study will identify potential businesses within Caerphilly, Blaenau Gwent County Boroughs, and those in the wider area which may benefit from establishing Business Partnerships and Short Supply Chains within the project through the supply of targeted Welsh Timber.
- 2.2.2 The primary aim of the study will be to establish the technical, financial and supply specifications required to establish Business Partnerships and Short Supply Chains. This information will be used to facilitate the implementation of the Timber Project as a viable and sustainable project.
- 2.2.3 The key aim of the Timber Project is to add value to the timber that is produced in and around the county Borough and identify innovative uses for Welsh Timber, testing new ideas and approaches and promoting the value of local Welsh timber.

3 POLICY FRAMEWORK

CAERPHILLY AND BLAENAU GWENT LOCAL DEVELOPMENT STRATEGY

- 3.1.1 The Local Development Strategy (LDS) for Caerphilly and Blaenau Gwent presents the current strategy, action plan, and delivery intentions of the Caerphilly and Blaenau Gwent Location Action Group (LAG) and has been prepared for the intention of participation within the Rural Development Plan for Wales 2014-2020 (RDP), LEADER and other related activities.

LEADER

- 3.1.2 Leader is a broad programme able to contribute to social, environmental and economic regeneration in rural areas. The programme aims to work collaboratively across the region where joint issues and needs are identified and to build on existing collaborative relationships establish through the implementation of the RDP.

Relevant Policies within the Local Development Strategy, September 2014

- 3.1.3 LEADER aims to increase the ability of local rural people and enterprises to participate in, support and improve initiatives that add value to local places, services or products. The following policies within LEADER support the Timber Project initiative.

- 3.1.4 **“Foster an entrepreneurial style culture for communities, individuals, and enterprises, to support the creation of innovative ideas and approaches”**

- Support pre-commercial and enterprise development, particularly in high added value sectors
- Research and identify the skills that can sustainably support the local rural economy investment in those areas – skills to low carbon jobs.
- Pilot innovative approaches and ideas that bring together sustainable social and economic impacts for rural areas

- 3.1.5 **“Contribute to an increase in the quality of life and wellbeing of people living and working in our rural areas and reduce the negative effects of peripherality”:**

- Develop innovative pilot projects that aim to address key local issues that reduce people’s capacity to engage in employment.
- Create a co-ordinated, holistic and practical signposting, advice and support mechanism for rural communities targeting energy costs, energy efficiency measures and energy generation particularly targeting the issue of fuel poverty.

- 3.1.6 **“Improve the productive use of existing resources in rural areas, adding value to local rural provision in a sustainable and resource efficient way.”**

- Support initiatives that promote and develop sustainable or community tourism based on heritage assets or local natural and cultural resources
- Add value to other programmes and providers by increasing service provision and reach in to rural areas

- Develop new ways of addressing land efficiency for natural, economic, environmental and social value.
- Increase the value of low grade local timber as a low carbon energy source – and promote as a sustainable building material.

Caerphilly Local Service Board

3.1.7 At a local level, priority needs are identified in the Caerphilly Local Service Board (LSB) Single Integrated Plan (SIP) which aims for a well-qualified and skilled population within a vibrant economy; and live, work or visit in a greener living environment.

3.1.8 The main priority within this plan, that support the Timber Project include:

- Providing support to enable local people to compete for all employment opportunities

3.2 REGIONAL STRATEGIC FRAMEWORKS – BLAENAU GWENT SINGLE INTEGRATED PLAN (SIP) 2013-2017

3.2.1 The Plan sets out five major theme priorities and the main theme that supports this project include:

- The plan for Thriving Communities – which aims to improve employment opportunities

3.2.2 Other relevant policies considered in the RDP and LDP

- Increase level of growth and development of existing SMEs and the establishment of new businesses that can make a contribution to the safeguarding and creation of sustainable jobs and growth.
- Supporting the growth and development of existing small and medium sized social enterprises and the establishment of new businesses that can make a contribution onto the safeguarding and creation of sustainable jobs and growth at the heart of the most deprived communities in South Wales. The role of vibrant social enterprises is vital for a successful economy.

3.3 RURAL DEVELOPMENT PLAN FOR WALES 2014-2020 (RDP)

3.3.1 The RDP 2014-2020 was adopted by the European Commission on 26 May 2015.

3.3.2 The RDP is financed by the Welsh Assembly Government and the European Union. It has been developed to help improve the quality of life for people living in rural areas, by improving the environment, creating more highly skilled jobs, and supporting local projects, as well as tackling more serious rural issues that affect many people in these areas, such as accessing basic services and low wages.

3.3.3 It is a 7 year investment programme that supports a wide range of activities which contribute to the following objectives;

- Fostering the competitiveness of agriculture
- Ensuring the sustainable management of natural resources, and climate action
- Achieving a balanced territorial development of rural economies and communities including the creation and maintenance of employment.

3.3.4 All of the projects that are funded by the RDP programme must along with one or more of the European Rural Development Priorities.

3.3.5 The Timber Project satisfies the following RDP Priorities;

- Fostering knowledge transfer and innovation in agriculture, forestry and rural areas;
- Enhancing farm viability and competitiveness of all types of agriculture in all regions, and the sustainable management of forests;
- Promoting a resource efficiency and supporting the shift towards a low carbon and climate resilient economy in agriculture, food and forestry sectors; and
- Promoting social inclusion, poverty reduction and economic development in rural areas.

3.4 **TIMBER BUSINESS INVESTMENT SCHEME**

3.4.1 The Scheme funding can be accessed via the Timber Business Investment Scheme which falls under the RDP and provides funding for capital investments that add value to forests by enabling woodland management activities, timber harvesting and/or timber processing.

3.4.2 Eligible activities under the scheme relevant to this project include:

- investments in development and rationalization of the marketing and processing of wood and wood products;
- investment may include small forest nursery related developments that are specifically related to one or more forest holdings;
- small to medium scale forest-based investments that will enhance forestry potential or that relate to the harvesting, processing and adding value to forest products, particularly environmentally friendly technology, including cable-cranes, skidders and other equipment suitable for small and/or inaccessible woodlands; and
- investments must be related to the improvement of the economic value of specific forests.

3.4.3 The Timber Business Investment scheme is an important element of the Welsh Government Rural Communities – Rural Development Programme 2014-2020 and proposed investments must show that a viable market has been identified for their product, and that the project would not proceed without the support of the grant.

4 METHODOLOGY

4.1 DATA COLLECTION

4.1.1 In order to gather information to analysis the feasibility of the supply chain and to identify if there is a current market and demand for timber within Caerphilly and Blaenau Gwent, a number of potential business partners were identified including the following businesses (table 5.1):

4.1.2 To establish the technical, financial and supply specifications, the following questions were asked during telephone interviews:

1. **The current source of timber being supplied – whether Welsh, European or other (specify);**
2. **The main use for the timber being supplied – whether the timber is for fencing, construction use (specify), furniture (specify), craft (specify), or other (specify);**
3. **The technical specification of the timber needed – dimensions, grading, moisture content (if specified);**
4. **Whether any certification is required/stipulated for their use of timber;**
5. **The type of timber needed – oak, larch, beech etc;**
6. **Supply volumes – the volume of timber required on a monthly basis ;**
7. **The price currently being paid – price per unit, per sq/ft;**
8. **Is the provenance of the timber important – would potential partners pay more for targeted Welsh timber?; and**
9. **Current gap in the market for types of timber or timber that is unavailable or difficult to source.**

4.2 ANALYSING THE DATA

4.2.1 The responses from each of the potential business partners were noted, and were later analysed to gain a better understanding of the feasibility and demand for wood from the Timber Yard in the area. The results are analysed and discussed in Chapter 5.

4.2.2 A SWOT analysis tool has been used to evaluate the potential Strengths, Weaknesses, Opportunities and threats of the Timber Project.

5

BUSINESS PARTNERSHIPS AND SHORT SUPPLY CHAINS

5.1.1

The following business and supply chains were identified as potential Business Partnerships in Caerphilly, Blaenau Gwent and the wider area.

Table 5.1: Potential Business Partnerships located within the Borough contacted during the study.

COMPANY	ADDRESS	TYPE OF BUSINESS	CONTACT
3 counties	Caerphilly	Timber Products	02920 869 068
Ark Timber	Tredegar	Timber Products	01495 717673
Ben Daniel	Redwick,	Supplies timber to Caerleon crafts and fair	07810 526525
Cameron Lewis	South Wales Trunk Road Agent	Producer of large volumes for small diameter wood and purchaser of wood products	01792 325934
Chris Wood	Caerleon	Carver / sculptor	07788 643897
Clive Francis	Abergavenny	Fire wood sales	07976 515722
Dave and Matthew Corran	Abergavenny	Tree Surgeons	07808 888596
Denman & Sons	Unit 1 Riverside Works Aberbeeg	Builders Merchants	01495 213140
Gavin Wyatt	Newport	Timber Products	01633 400720
Gwent Wildlife Trust	Major	Timber Products	01633 889048
Isca Wood Crafts	Newport	Supplier of craft timber	07854 349045

COMPANY	ADDRESS	TYPE OF BUSINESS	CONTACT
Jim Keetch/ Tim Bradfield	Monmouthshire County Council	Timber Products	01633 644962
Joe Atkinson (NRW)	Abergavenny	NRW Forest Planner	07502 347780
John Watkins	Argoed, Blackwood, NP12 OAX	Instrument Maker	(01495) 225 019
Magor Saw mills	Magor	Timber Products	01633 880454
Premier Forest Group	Croespenmaen	Timber Products	Dilwyn Howells 07880 541 237
Richard Bakere	Gwent Wildlife	-	rbakere@gwentwildlife.org
Richard Cross	Caerphilly	Instrument Maker	http://www.shapelywood.com/
Robert Price	145, Pontygwindy Road, Caerphilly	Builders Merchants	02920 883 170
RSPB Newport	Newport	Timber Products	01633 636363
Shona Carle	Newport City Council	Timber Products	01633 210556
TJ Kippax Carpentry and Joinery	Van Rd, Caerphilly	Bespoke Joinery	(07515 027 933
Vaughan Lewis	Markham	Woodland management	07961 322908
Vintage Joinery	Unit 9 Cwmtillery Industrial Estate Abertillery NP13 1LZ	Carpentry /Joinery	01495 214115
Vintage Joinery	Abertillery	Carpentry / Joinery	01495 214115

COMPANY	ADDRESS	TYPE OF BUSINESS	CONTACT
White Willow Furniture	Caerphilly Business Park	Bespoke Furniture	(02920) 864 958
Woodcraft Wales	Blackwood	Carpentry /Joinery	07866 266780
Woodland Joinery	Unit 10 Llanhilleth , Abetillery NP13 2RX	Carpentry /Joinery	01495 321452
Yandle & Sons	Somerset	Timber Merchants	01395 822207

5.2 CHALLENGES AND OPPORTUNITIES

- 5.2.1 The purpose of the Timer Project is to develop and identify supply chains and business partnerships. As will be seen, there does not appear at present to be an appreciation of the ‘value’ of locally sourced Welsh timber and further work is therefore needed to address this ‘market failure’.
- 5.2.2 The telephone interviews were undertaken over four weeks (between 24 May and 25 June), as several of the potential partners were proving difficult to contact. The answers of those that responded have been recorded and dated in. As shown at Table 5.2 below.
- 5.2.3 The remaining business partners that were unavailable to answer or respond were left a voicemail message and sent an email containing a brief introduction to the project and the questionnaire. Attempts to meet several in person were also made but this also proved unfruitful.
- 5.2.4 Several of the potential business partners were difficult to contact, predominately due to the nature of the job, many of which were not situated in an office. The nature of the timber forestry and arboriculture industry obviously requires outdoor work, operating noisy machinery and driving between jobs, it is therefore difficult to engage with and difficult to obtain information from potential partners. Many of the potential partners were honest and explained that they were too busy to answer, or not situated within a safe place to answer any questions regarding their interest in the Timber Project. These partners were also sent an email allowing them to answer the questions in their own time. Many of which did not respond to the email.
- 5.2.5 The potential business partners that did not wish to participate in the questionnaire, or did not wish to be associated with the Timber Project were noted in the list. Some of the potential partners do not purchase their own timber, while others had established relationships with their own suppliers of timber.

TABLE 5.2: RESPONSES FROM POTENTIAL BUSINESS PARTNERS REGARDING THE TIMBER PROJECT

	SUPPLY CHAIN	PHONE CALL CONVERSATION / TYPE OF BUSINESS	WHAT IS YOUR CURRENT SOURCE OF TIMBER BEING SUPPLIED? IS IT WELSH, EUROPEAN OR ANY OTHER	WHAT IS THE MAIN USE FOR THE TIMBER BEING SUPPLIED? FENCING, CONSTRUCTION USE, FURNITURE, CRAFT, OTHER	WHAT IS THE TECHNICAL SPECIFICATION OF TIMBER NEEDED?	ANY CERTIFICATION IS REQUIRED/STIPULATED FOR THEIR USE OF TIMBER?	TYPE OF TIMBER REQUIRED - OAK, LARCH, BEECH ETC	THE VOLUME OF TIMBER REQUIRED ON A MONTHLY BASIS	THE PRICE CURRENTLY BEING PAID PER UNIT, PER SQ/FT	IS THE PROVENANCE OF THE TIMBER IMPORTANT - WOULD POTENTIAL PARTNERS PAY MORE FOR TARGETED WELSH TIMBER?	CURRENT GAP IN THE MARKET FOR TYPES OF TIMBER THAT IS UNAVAILABLE OR DIFFICULT TO SOURCE
1	Chris Wood		All species - big trunks of trees - no specification.	Big trunks of Trees are usually used. No specification is required as the wood is mainly used for carving with using chainsaws to create bespoke pieces.	Mainly hardwood	No	Varies	The business works by purchasing wood, depending on the proposed project which can vary.	Varies depending on project.	No – As long as the wood is FSC registered the cheapest wood is purchased.	No
2	Clive Francis	The business does not purchase timber, it sells timber.									
3	Craft Wales	The business owner mentioned that he previously bought timber from Mike Winterfield at Cwm a Mynydd	Wood purchased is mainly European - treated soft wood. British or European	Mainly work for Caerphilly council including quite recently bridges in the Parcs.	Mainly Oaks and Chestnuts which are currently sourced from a farm in Brecon. Mainly	The Wood has to be FSC registered to ensure they are coming from managed source.	Varies depending on work load from Caerphilly Borough. It also depends on work load	It varies, however standard pricing is approximately – 9 x 1 £2.64	28 Oak cubic foot -		

		before it closed.	hardwoods – which depends on the work from the council.	The wood is also used to make signs and benches for local schools.	using green timber for all projects.		relating to the local schools and what they are willing to pay / what is required to be built.	3 x 9 £8 2 inch £5			
4	Denman and Sons		Mostly European and American	Stairs, windows and doors	The specification is different depending on project	No	Varies-Scandinavian soft woods mostly.	Varies	Varies depending on what the project is.	No – As long as the wood is FSC registered the cheapest wood is purchased.	The business is able to get hold of all wood required.
5	John Watkins		Mostly European	The business makes wood instruments comprising violins and cellos.	The wood is chosen specifically depending on what instrument will be made, and it is chosen for its acoustic qualities. For example, Violins usually require Spruce Maple, or Sycamore with a good figure. Exotic woods are used such as Ebony primarily for fingerboards.	No – usually just FSC which is standard.	Maple, Sycamore, Spruce.	Very small amounts. The business makes approximately 12 violins a year.	Good set of wood for violin would cost approximately £80 for the front and £250 for the back.	For this business yes – as the acoustic property of the timber is important. For good acoustic properties the timber needs to grow at an altitude, therefore it needs to be carefully selected. The business frequently selects Sycamore sourced from Yorkshire.	The business on occasion purchases wood from specialist suppliers that specialise in wood grown at high altitude and exotic woods, which are required during the manufacture of the instrument. These can be difficult to source on occasion.
6	Merthyr Tydfil Institute for the Blind		Mostly European	To make furniture and various projects	Varies depending on the project	No	Varies	Varies	Varies, depending on the project and work load.	No – As long as the wood is FSC registered the cheapest wood is purchased.	No
7	Pont Woodcraft		Involved with purchasing wood from Cwm	Soft wood is purchased from	The wood needs to be of a certain	The business wasn't aware of any required specification used for	Soft Wood such as oak and wood that	Depending on the amount of	Varies – £2.64 9 x 1 £8 3 x 9	Much of the decision would depend if the	Because the business is not currently able to

			a Mynydd Timber Yard and Monmouthshire council.	Monmouthshire timber and hardwood from Cwm a Mynydd Timber Yard.	standard due to the machinery used within the business.	the timber they purchase.	is a bit more expensive.	work which varies. The business will order enough wood about every 6 weeks.	£5 2 inch	customers would pay more, as the money that comes from the sale of the product, pays for the next project.	get hardwood from Cwm a Mynydd that is something they would like to look at.
				Mainly to make garden furniture planters, children's chairs, Christmas crafts and block signs.	Some wood can be used but it depends on the quality and if it has been already treated.		Beech is used sometimes, however there is no preference and any wood is used if it is good quality.			The yard is more about being sustainable not for profit so the council are not paying for the project.	In the past the business has found that people will pay more for hard wood if needs be.
8	Richard Bakere – Gwent Wildlife Trust		Purchased from Pontrilas, Terry Howells, Countrywide, ALS trading and Penhow and occasionally others as required.	Fencing, boardwalk, bridges, signs, and forest schools. Occasionally some materials are sourced from the nature reserves and processed with an Alaskan mill (to create beams for bridges etc).	Straining posts 7ft 5-6" tanalised Stakes 5ft 6 or 6ft 3-4" tanalised Struts 8ft 3-4" tanalised 4.8m 2x4" or 1.5x3.5 tanalised boardwalk beams sometimes c16 Gates, various other projects	The business seeks to ensure all materials purchased are FSC sourced. But they do not stipulate that it has to be of Welsh origin. With the business being situated on the border, local sources are also available from across the border.			Approximate spend £100 per month	In a border location the business would find it hard to pay extra for a Welsh provenance certification.	
9	RSPB - Newport	NRW own the majority of the site – they do not purchase timber									
10	Shona Carle –		The purchasing	Fencing	The business	Any timber required	Varies	Varies	Varies	No – As long as the	No

	Newport		of wood is left to the contractor, None of the wood felled on site is used. The council buy in tree stakes buy in gates stiles and footbridges	Boardwalks Gates and Stiles mainly.	don't usually get involved with the specification, the wood is usually selected at via a catalogue.	needs to be pressure treated including - tanalised and pressure treated				wood is FSC registered the cheapest wood is purchased.	
11	The National Trust		Native timber from within own estate	250T / yr to wood chip to feed bio boiler providing heating and hot water for regional office. Hardwood logs for estate houses wood burners. Hard wood milled to provide countryside furniture, Western red cedar sold to local markets for roughly £800 per load	Big enough and round enough to suite their machinery and won timber requirements	none	All native hard wood including Beech and Oak. Western Red cedar removed as crop or invasive.	250t of woodchip per year. Hardwood as required for houses. Furniture as required.	Western red cedar	Timber from own estate used within own estate unless sold. They would not pay more to purchase Welsh timber.	
12	TJ Kippax Carpentry and Joinery	The business has changed recently, and it is now mainly building work. The new business is called Design and Construction which does not purchase	European builders merchants	Mainly carcasses timber, joints, PSE - any finish carpentry.	C24 dry graded. Treated timber, varies depending on project	No	Varies, mainly European.	Varies	Varies	No – As long as the wood is FSC registered the cheapest wood is purchased.	No

Ultimate Arcade Cabinets

feedback.

However normal laminated MDF is not usually available in format needed by the business.

They operate using a CNC machine so any wood purchased would need to be put in panels.

The business definitely would in interested in receiving real wood from the potential timber yard, and promoting locally sourced wood in wales as they have found that it does appeal to the customer.

Going forward with their involvement with the Timber Project, the business would need to speak to someone to ensure the wood will be available in the right

			format and right price.								
14	Vaughan Lewis	Previous supporter / partner of timber project	Does not use timber	Does not use timber	Does not use timber	Does not use timber	Does not use timber	Does not use timber	Does not use timber	Does not use timber	Need to include the “timber story” to add value to material produced. Should the public sector be competing with private sector? Many species of timber would like to use Welsh wood but have found trouble with availability of stock and clients request for FSC marks. Need to keep track of timber miles. A number of outlets / partners no longer available / bankrupt
15	Vintage Joinery		Local timber, European, and American.	Stairs, windows and doors	N/A	No	European Oak, Hiroko, and Sample.	Approximately 3m cubed	Ranges - EO - £2000 a cube.	No – As long as the wood is FSC registered the cheapest wood is purchased.	No
16	White Willow Furniture		European and North American	Used to build furniture.	The timber needs to be cline dried, and furniture dried.	All timber is purchased from managed forest all different qualities	Timber Oak, man-made board and cross boards.	It's hard to measure as the business always has wood in stock, so it varies	It varies depending on project and quality of the wood.	The business has not considered welsh timber and it is not something they were apparently aware of. They commented that they had never seen it advertised. However, It would	The business is able to purchase all materials they require.

										be something they would definitely consider if it was locally available, in order to cut down on delivery costs.	
17	Yandle & Sons	Timber merchant	Local timber, European, and American	Supplies craft market in UK.	Many and varied depending on craft / project requirements.	Depends on end use for product i.e. Craft / Hobby / structural / furniture	All species of wood.	Significant amounts / very large yard and throughput.	Varies depending on species, size, treatment and quality.	Varies, Yandles import wood from all over the world.	No

6

STRENGTHS WEAKNESS OPPORTUNITIES AND THREATS ANALYSIS

6.1 SWOT ANALYSIS

6.1.1 This section will analyse the Strengths, Weaknesses, Opportunities and Threats to the Timber Project.

Table 6.1:

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> Based locally in the area Looking to support local business and trade. Providing a sustainable project which may lower carbon footprint of importing wood from outside the UK – connecting a Low Carbon Wales / low wood miles Encouraging sustainable timber use by using lower grade timber. Low capital intensive – the scheme does not require large sums of set up funding. Good existing network of woodland owners / farmers / land based industries Potential access to low cost standing stock within CCBC / BGC own woodlands Existing skill sets within CCBC / BGC 	<ul style="list-style-type: none"> Requires stakeholders to source and agree terms for financial management systems and controls with a team used to operate within an open/commercial market. Due to funding arrangements the project should not compete with existing similar local businesses Will require not insignificant on-going funding for maintenance of machinery and other overheads such as premises, staff and fuel Niche market that requires niche skills in forestry / woodland management / arboriculture management / timber selection / assessment / processing and conversion / business development Needs a “champion” or group to positively drive the project.
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> Highly labour intensive – therefore it has the potential to create skilled and worthwhile employment for the local 	<ul style="list-style-type: none"> Brexit implications - reliant on RDP Funding, also reliant on not for profit /

<p>community.</p> <ul style="list-style-type: none"> • Reduce the need to import wood from Europe. Allowing for better wood miles on final products • Sustainable – recycling using reclaimed wood / by products of woodland / forestry and arboriculture processes 	<p>local government organisations</p> <ul style="list-style-type: none"> • Several local small scale enterprises have similar timber re-use / re-allocation projects • Several key outlets and previous partners lost through bankruptcy or and lack of chain of demand
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6.2 CASE STUDIES – SUCCESSFUL TIMBER YARDS / OPERATIONS

The National Trust (Central Chilterns)

- 6.2.1 The National Trust in the Central Chilterns region holds a large area of woodland that is comparative in tree population to that of Caerphilly and Blaenau Gwent Councils. The trust has an operational timber project that uses existing countryside staff to fell extract and process wood products for use within the Trust and for sale externally.
- 6.2.2 The Trust produces in the region of 250 tonnes of wood chip a year that is used to fuel a biomass burner at their regional office. The burner is used in the winter months to provide heating and hot water. They also produced hard wood logs for use in their own houses wood burners which are typically (although not always) tied houses for staff.
- 6.2.3 The trust also produces its own countryside furniture such as gate posts, fencing, benches from hardwood produced within the estate. Where soft wood such as Western Red Cedar (planted as a crop or found as invasive in some areas) is harvested it is sold to the open local market generating income. The cedar is sold as felled from the yard but occasionally is sold as standing stock allowing the Trust to have woodland / forestry operations undertaken while also receiving income. This does however require careful management by a suitably trained and experienced person.

South Wales Trunk Road Agent (Soft Estate Management)

- 6.2.4 While investigating methods for making efficiencies in the time and expense associated with managing the linear woodlands adjacent to its motorways and dual carriageways the South Wales Trunk Road Agent (SWTRA) explored alternatives to felling to waste which often resulted in members of the public stopping on the live network to “collect” fire wood without permission. Two options were taken forward with differing success.
- 6.2.5 In the Western region, large machinery was used to cut and process standing trees into woodchip at the roadside. The chip produced was extracted to a collection point where it was then sold to and collected by Stobarts Biomass. Depending on market rate good quality woodchip can achieve in the region of £30 / tonne. Over last 2 cutting seasons several thousand tonnes of chip have been sold.
- 6.2.6 Depending on the contract arrangements the revenue generated from these sales can either be absorbed by the contractor allowing a lower fee to be paid by the client; or, the client can receive the revenue and use it to fund other works or offset the cost of the total contract. It should be borne in mind that these works were on a large scale and that the revenue generated would only cover part of the costs of the works.
- 6.2.7 The second option explored was on a smaller scale in the eastern region where several hundred tonnes of timber was produced through similar works as those above. In this case there was not sufficient space on site to accommodate the large machinery required. To that end a local timber merchant was approached to take the wood from site at no cost to the project on the understanding that the timber would be sufficient payment for the merchant
- 6.2.8 Unfortunately the merchant did not prove to be reliable which compounded the Arboriculture contractor's opinion that timber collection for uses other than chip or firewood is more hassle than it's worth. As a result of this the timber was removed from site by the contractor at an additional cost to the project.
- 6.2.9 The key lessons here are that scale and efficiency of the timber operation are vital as is a reliable and competent workforce.

Scottish Woodlands (predominantly coniferous / soft wood sector)

- 6.2.10 Scottish Woodlands is the largest supplier of private sector timber in Scotland. For over 100 years the Company has successfully provided woodland clients with harvesting services and access to a wide variety of markets for timber products.
- 6.2.11 Part of this success has been based on working closely with existing and new industry to develop wood supply and access to markets, whilst also maintaining their independence.
- 6.2.12 It should be noted however that the success of this case is based largely on its scale and availability of a known product with an established market while also maintaining personal contacts with land owners / estate managers.

Tilhill Forestry (predominantly coniferous / soft wood sector)

- 6.2.13 Tilhill Forestry is a leading forestry management timber harvesting and marketing company based in a network of offices across the UK. They offer a full range of contracting and timber marketing services to woodland and forestry owners. They also supply all major wood using traditional industries and emerging energy markets.
- 6.2.14 Their harvesting services range from large scale merchandised harvesting of upland forest, to horse logging in sensitive areas. Stump harvesting and heathland restoration are all managed professionally and responsibly.
- 6.2.15 Smaller mixed woodlands are managed differently. In most cases trees are individually identified for felling. A forester will identify the tree for felling and the tree will be chosen for its intended use productively.
- 6.2.16 The plantations are harvested and converted into forests for the future, creating mixed and multipurpose woodlands with a range of tree species and ages. During re-planting of the trees, this allows the forestry managers to create a different structure which allow for more natural features which fit into the landscape and promote the environment.
- 6.2.17 UK forestry is built on a network of family run businesses working together to form a supply chain. This promotes employment and allows the timber businesses in the region that are heavily reliant on this business to grow.
- 6.2.18 The Scottish based Timber Yards emphasis the significance of the success of its forestry management, which in addition to protecting and enhancing the environment, it also promotes and creates local employment in rural areas which helps support the local economy.
- 6.2.19 Tillhill have purchased some of the largest timber mills in the UK securing not only the raw material but a range of products the purchaser and the market. While it is understood that this is a national multi million pound enterprise. It demonstrates that scale and connectivity with all phases of the timber market is key.

Cilsanws Saw Mill Project, Merthyr Tydfil

- 6.2.20 Cilsanws Saw Mill Project Merthyr Tydfil - In 2011 Merthyr Tydfil CBC in conjunction with the Merthyr Tydfil Naturalists Society and Groundwork RCT & Merthyr secured funding to re-open a dilapidated saw mill at Cilsaws along with a new heritage and biodiversity centre.

6.2.21 The project was based on the assumption of the Naturalists Society taking the lead with funding support to establish a new social enterprise company who would provide a facility for education purposes relating to local ecology, biodiversity and to assist in the maintenance of the surrounding woodlands. It was intended that the supply of 'waste' timber from Council owned sites could be brought into the saw mill and cut to size for supply to the local timber industry.

6.2.22 However, the project failed mainly due to the lack of a robust business plan not being developed in identifying the potential demand and supply for the timber. Also the Naturalists Society failed to develop a social enterprise model which could take ownership and run such a facility.

6.3 LESSONS LEARNED

6.3.1 From the research undertaken there does not appear to be a strong demand and hence a 'local market'. In particular, there does not appear to be a significant demand for hardwood timber in the Caerphilly County and Blaenau Gwent area. There is no demand for specialist wood that grows in the area.

6.3.2 The main use of timber in the local area is by the building merchants and carpentry businesses for the creation of stairs, windows and doors. Some of which purchase local Timber, but predominately require European Hard Wood. With the exception of one, none of the potential business partners said they would pay more for targeted Welsh timber, and the provenance of the timber is not important to their business. The South Wales Trunk Road Agent stated that they would pay more for Welsh hardwood if it was mandated by Welsh Government or if their steering document (the Design Manual for Roads and Bridges – DMRB) stated that timber miles, the distance timber travels from source to end use, were to be maintained within a certain threshold. One of the potential business partners (White Willow Furniture) explained that they were not aware of Welsh Timber and they had never seen it advertised, but it is something they would consider if it was locally available.

6.3.3 There does not seem to be a strong degree of importance attached to the provenance of timber from the research undertaken. Although the sample was small, it does perhaps reflect a lack of appreciation for the value of Welsh timber.

6.3.4 There is clearly a need to promote the benefits of sustainable Welsh timber, and the potential economic benefits that this would bring. By working with a small number of partners there may be an opportunity to test local supply chains in order to support an improved market for Welsh Timber.

7

ADDITIONAL INFORMATION

7.1.1

The following points identify additional information and potential options which has been provided by the potential partners:

- Consider potential partner working between the existing project and small scale private sector enterprise. In effect work with a small existing business to develop the needs of that business and the timber project. Financial support for the project could decrease over an agreed period allowing the project to become a self-funding enterprise.
- Consider joint staffing / shared officer with Coed Cymru.
- Consider spreading the net wider in terms of geography and the range / stage of products available. For example provide flat pack bird boxes rather than just the plank to make a bird box.
- Keep accurate record of the timber's story. Craft industries can often add value with a good back story as to where the wood came from, why it was felled.
- Consider producing timber cladding or work with partner to supply local Welsh Timber clad.
- Consider FSC certification.
- It's difficult to get right and can be expensive but consider keeping regular stocks of timber at relatively standard sizes (rather unhelpfully did not provide recommended sizes).
- There is an opportunity for a new robust social enterprise to be established and lead on its development.

8 CONCLUSIONS

8.1 INTRODUCTION

- 8.1.1 The information and research obtained from the potential partners and wider case studies indicates that there are 4 potential options for the project. These are as follows:

8.2 OPTION 1 - SCOTTISH WOODLANDS MODEL:

- 8.2.1 Expand significantly to capture a wider market and to include commercial aspects of forestry and timber production such as harvesting and production of highly consumable products such as manmade boards (OSB, MDF, Chip boards) or biomass production.
- 8.2.2 This model is highly likely to be in direct competition with small woodland owners, forestry contractors and Natural resources Wales.
- 8.2.3 The capital outlay for this operation would greatly exceed any benefit to Caerphilly and Blaenau Gwent Councils.
- 8.2.4 There could be potential funding streams available from City Deal funding if a regional collaboration is undertaken.

8.3 OPTION 2 - NATIONAL TRUST MODEL:

- 8.3.1 Decrease the scale of the project to service internal market occasionally selling externally where product and market allow.
- 8.3.2 One of the key reasons this project has been a success is that it has used existing staff, an existing yard area and uses machinery at a suitable scale that can also be employed for other purposes.
- 8.3.3 The woodchip specification and cost of biomass boiler will need further research before adopting this model.
- 8.3.4 This model has potential to sustain the existing timber project until such time markets for timber improve, catchment area can be increased or more suitable partners can be found.

8.4 OPTION 3 - HYBRID MODEL:

- 8.4.1 Predominantly follow the National Trust model but work with other departments of Caerphilly and Blaenau Gwent Councils (and neighbouring authorities in Cardiff City Region) to undertake larger scale woodland management activities similar to the SWTRA model.
- 8.4.2 This option will work on basis where the material generated can be sold as chip to recover the cost of operations. This would also allow for shared staff, machinery, woodland and storage / yard facilities within the region.
- 8.4.3 Re-scope the project focus on small scale pilot projects with interested business partners.
- 8.4.4 Link in with leading organisations to test innovative ideas locally with the aim of promoting Welsh timber, including Coed Cymru, Natural Resources Wales, and others.

8.4.5 Create a market for Welsh Timber and increase the understanding and benefits of locally sourced timber and emphasise the story behind where the timber came from.

8.5 **OPTION 4 - CLOSURE:**

8.5.1 Funding implications and reduction / loss of EU funding programmes may dictate such an option.

8.6 **NEXT STEPS**

- Agree Option for way forward
- Investigate Cardiff City Deal Proposal
- Identify suitable bodies to lead development
- Investigate collaboration with Coed Cymru, NRW and neighbouring local authorities and other partners.