The Marches Land Use Study Land Use Opportunities Report

Prepared by TACP (UK) Ltd for The Marches Local Enterprise Partnership









CONTENTS Land use Opportunities Report



INTRODUCTION

.1 .2 .3 .4 .5 .6 .7	THE COMMISSION STUDY SCOPE AND AREA STUDY PROCESS HOW TO USE THE STUDY POLICY FRAMEWORK: NATIONAL AND LOCAL RELATED STUDIES GREEN SPACE INVESTMENT BENEFITS	1 1 3 4 9 9
2	METHODOLOGY	12
	ASSUMPTIONS	
5	LAND USE ASSESSMENT	16
	EXISTING LAND USE ASSESSMENT LAND USE OPPORTUNITIES SUMMARY CONCLUSIONS	16 20 29
۱. I	NATURE BASED INVESTMENT PROSPECTUS	30
1.1 1.2	AREAS WITH GREATEST OPPORTUNITY FURTHER CONSIDERATIONS AND NEXT STEPS	30 49
		FO

Prepared by TACP (UK) Ltd for The Marches Local Enterprise Partnership

1 INTRODUCTION

1.1 THE COMMISSION

The Marches Local Enterprise Partnership (LEP), working with the Marches Nature Partnership (MNP), has recognised the underutilised potential within the Marches for green investment, particularly around renewable energy production, woodland creation, and alternative environmentally beneficial land uses. Based on this, the Marches LEP has commissioned TACP (UK) Ltd to prepare a Land Use Opportunities study of the Marches, covering a 2,300 square miles area comprising the Local Authorities of Herefordshire Council, Shropshire Council and Telford & Wrekin Council. The study aims to explore and identify areas with the greatest opportunity for green investment and sustainable land use changes. This document identifies the methods and results of the study, and an accompanying investment prospectus based on the study outputs.

1.2 STUDY SCOPE AND AREA

1

The study area encompasses the whole of Herefordshire, Shropshire and Telford & Wrekin (Map 1).



The study has five main objectives, these are to identify:

- current land use across the study area, detailing how much is farmed, how much is woodland, and how much is land outside of productive agricultural, amenity use or open space;
- opportunities for renewable energy production, focusing on solar and wind energy;
- opportunities for woodland creation and increasing bio-diversity (including opportunities for carbon offsetting);
- 4. benefits of investing in green spaces, energy, and green infrastructure;
- 5. grant funding initiatives to aid sustainable land management i.e. grants for biodiversity, tree planting and woodland creation and management.

The above objectives are presented within two distinct outputs:

Land Use Opportunities Report Nature Based Investment Prospectus

The Land Use Opportunity Report section of this document sets out current land use within the study area and the methodology for assessment. It then presents the assessment findings, identifying areas of opportunity for woodland creation, solar energy, and wind energy generation. Whilst reference has been made to tourism, flood management, water supply and health and well-being, these have not been fully assessed at this stage and would require further study. It should be noted that the outputs highlight areas with the greatest opportunity only. They are designed to inform landowners and land managers of the opportunities for alternative land use and do not make recommendations for land use change. Any changes to land use will still need to be approved by the local planning authority as applicable.

The Nature Based Investment Prospectus presents areas that have the greatest opportunity for woodland creation, solar energy, and wind energy generation based on the study findings. It also presents relevant grant funding opportunities and where additional grant funding may be found. It presents cases studies of alternative land uses within The Marches and further afield. It also suggests next steps and further actions required to capitalise on the opportunities highlighted throughout the report. These not only indicate the financial benefits but highlight the need for future business opportunities to be climate resilient and sustainable.

1.3 STUDY PROCESS

The study process combines a desktop review of existing studies, local and national policy analysis, and an assessment of land use using publicly available and local authority provided data. This has been supported by regular client body/steering group sessions and feedback. The detailed methodology for the study of identifying land use opportunities is presented in the Methodology section.

1.4 HOW TO USE THE STUDY

This study and supporting documents provide an indicative look at land areas with the most opportunity for woodland creation, solar, and wind power generation based on current land use, designations, and physical properties. The information presented should be used as a guide to identify possible sites for these land use changes. Once identified, further in-depth studies on a site should be undertaken to fully establish its suitability, requirements, any constraints and planning compliance.





1.5 POLICY FRAMEWORK: NATIONAL AND LOCAL

The following tables present national and local policy and guidance that should be considered when interpreting the information presented in this report.

Policy/Guidance	Purpose	Policy/Guidance	Purpose
Renewable Energy		Renewable Energy	
Environment Act 2021	 The Act to make provision: about targets, plans and policies for improving the natural environment; for statements and reports about environmental protection; for the Office for Environmental Protection; 	25 Year Environment Plan	The plan sets out government action to help the natural world regain and retain good health. It aims to deliver cleaner air and water in cities and rural landscapes, protect threatened species and provide richer wildlife habitats. It calls for an approach to agriculture, forestry, land use that puts the environment first.
	 » about resource efficiency; » about air quality; » about water; » about nature and biodiversity. 	Woodland Creation	
			An Act to make provision:
British energy security strategy	This policy paper sets out the key targets and funding to achieve the government's 10-point plan for energy security, decarbonisation and natural environment protection.	Environment Act 2021	 about environmental protection; » for the Office for Environmental Protection; » about resource efficiency; » about air quality; » about water; » about nature and biodiversity.

Policy/Guidance Purpose		Policy/Guidance	Purpose
Woodland	d Creation	Woodland Creation	
25 Voor Environment Blan	The plan sets out government action to help the natural world regain and retain good health. It aims to deliver cleaner air and water in cities and rural landscapes, protect threatened	England Woodland Creation Offer	Provides guidance on how to get support to create woodland using the England Woodland Creation Offer.
	species and provide richer wildlife habitats. It calls for an approach to agriculture, forestry, land use that puts the environment first. Setting out 10 environmental goals.	Seeing the wood for the trees: the contribution of the forestry and timber sectors to biodiversity and net zero goals	The report produced by the House of Commons Environmental Audit Committee sets out how the growing global and UK timber demand can be managed to improve biodiversity and
Environmental Improvement Plan	The plan reinforces the intent of		work towards net zero goals.
2023	is the first of the 5-yearly reviews and refresh of the plan.	The UK Forestry Standard	Sets out the government's approach to sustainable forestry.
England Trees Action Plan 2021 to 2024	Setting out the government's long-term vision for trees, woodlands and forests in England and the actions to be taken.	Understanding biodiversity net gain (DEFRA Guidance)	Outlines the requirements and application of Biodiversity Net Gain for new developments.

Table 1: National policy and guidance

Policy/Guidance	Purpose	Policy/Guidance	Purpose	
Shropshire		Shrop	oshire	
The Shropshire Development Plan	The plan identifies a vision and framework for the future development of Shropshire.		The plan identifies a vision and framework for the future development of Shropshire to 2038; addresses needs and opportunities	
The Shropshire Core Strategy (adopted 2011) The strategy establishes the Council's vision, strategic objectives and broad spatial strategy to guide future development and growth in Shropshire to 2026.		Draft Shropshire Local Plan (2016 – 2038)	in relation to housing, the local economy, community facilities and infrastructure; and seeks to safeguard the environment, enable adaptation to climate change and helps to secure high-quality and accessible design.	
Site Allocations and Management of Development (SAMDev) Plan (adopted 2015)	The SAMDev Plan seeks to deliver the vision, strategic objectives and broad spatial strategy identified within the Core Strategy (2011), through the identification of site allocations for development and policies to appraise development	Shropshire Council - Local Development Scheme (LDS)	The Scheme is the 'Project Plan' that identifies the documents Shropshire Council will prepare as part of the Development Plan over the next 3-year period (2023 - 2026).	
	proposals. The SAMDev Plan is accompanied by a Policies Map which illustrates geographically the scope of policies within the Development Plan, including the location and extent of site allocations.	Shropshire's Economic Growth Strategy 2022-2027	The strategy sets out how Shropshire will work towards its vision of utilising the unique environment and high-quality assets, co-create a connected, competitive, sustainable and inclusive economy: one that is nationally recognised where businesses and residents are thriving, healthy and resilient.	

Policy/Guidance	Purpose	Policy/Guidance	Purpose
Shropshire		Shropshire	
Shropshire Council - Renewable energy development guidance	Guidance for prospective installers of renewable energy (from individuals, homeowners, businesses to larger developers and landowners); proposing to install renewable energy on their property or land.	Agroforestry/orchards systems guide	The guide details the kinds of agroforestry that are commonly used on farms practiced across 14 farms in Shropshire as part of the pilot scheme.
	https://www.shropshire.gov.uk/	Herefo	rdshire
	media/24772/renewable-energy- development-guidance-faqs.pdf		The Local Plan 2021- 2041 will set out the planning framework for the
Shropshire Hills AONB Management Plan 2019-24	The five-year plan sets out landscape management plans, sustainable economy and communities opportunities including agricultural development and renewable energy	Herefordshire Local Plan 2021 - 2041	county for the period to 2041 and will cover issues such as housing provision, the economy, retail and town centres, infrastructure provision and the environment.
Tree planting in the Shropshire Hillswithin the AONB.Provides guidance on achievir national AONB target of plant enabling natural regeneration		Herefordshire Core Strategy 2011 - 2031	The strategy shapes future development and sets the overall strategic planning framework for the county.
(Guidance)	least 36,000 hectares of woodland in AONBs by 2030. Also, providing direction on adhering to the guiding principle of planting the right tree in the right location.	2050 Economic Plan	The plan sets out how Herefordshire will work towards achieving its vision of a vibrant, healthy, zero carbon, and inclusive place to live, work, study and visit at all stages of life by 2050
Trees Outside Woodlands Programme	The programme is developing innovative and sustainable new ways to increase tree cover to address both the climate and ecological emergencies.		

Policy/Guidance	Purpose	Policy/Guidance	Purpose
Herefo	rdshire	Telford & Wrekin	
Carbon Management Plan 2020/21- 2025/26	Sets out pathway and targets for carbon neutrality for Herefordshire Council by 2030 including a target of 100% renewably sourced energy.	Local Plan 2011 - 2031	The plan explains what type of place the Borough of Telford & Wrekin is today, the type of place it aspires to be in the future and to provide a framework to help manage change
	The five-year plan sets out landscape		and development until 2051.
Malvern Hills AONB Management Plan 2019 - 2024	cultural environment, and community life within the AONB.	Local Development Scheme 2022 -	The plan addresses the area's needs and opportunities on a range of topics including the economy, bousing community facilities the
Zero Carbon and Nature Rich: Herefordshire's Action Plan for	Sets out actions, funding and deadlines for the delivery plans In Herefordshire around the strategic approach and spatial mapping; encouraging and offering support for communities, businesses and individuals to manage land to maximise biodiversity potential and carbon absorption; and ensuring that the biodiversity and carbon absorption potential of Council and	2025	built and natural environments and infrastructure.
Farming and Land Use 2021		Telford Vision 2032	Sets out a ten-year vision for Telford and Wrekin built around three key ambitions based around an inclusive carbon neutral economy, inclusive communities, and inclusive, healthy, independent lives for its residents.
	privately owned and managed estate is maximised.	Tree and Woodland Management	The policy sets out the Council's policies for operational tree and woodland management in line with health and safety, national legislation, national Best Practice and relevant Council strategies and objectives, including the direct link to planning policy and climate change.

Table 2: Local policy and guidance

1.6 RELATED STUDIES

Previous studies have been undertaken on the Marches that link to and provide context for the findings of this report. These are:

Marches LEP Energy Strategy Marches-Energy-Strategy

Marches Strategic Economic Plan - Marches SEP 2019

1.7 GREEN SPACE INVESTMENT BENEFITS

There is growing consensus on the numerous benefits green spaces bring us, from mitigating climate change and air pollution, to improving our health and wellbeing, supporting wildlife and biodiversity, and improving community cohesion. They give us improved air and water quality, lower noise levels and provide temperature regulation. For example, woodlands absorb pollution and lock up carbon, which cleans our air. Trees and vegetation can also provide cooling through evaporation of rainfall collecting on leaves and soil. Trees also contribute to cooling through shading and by reflecting more solar radiation while storing less energy compared to many artificial surfaces like concrete and asphalt, which retain heat long after the sun has set. Wetlands store water, reducing flows and help reduce the risk of flooding whilst also providing a wildlife habitat. These functions benefit society and help reduce costs on local and wider communities, such as to the NHS, other public sector services and local businesses. For instance, trees and woodlands in and near urban areas are essential for supporting your health and wellbeing and improving quality of life. Studies indicate that spending time in nature has substantial beneficial effects on the immune system. They also indicate the incredible amount of health outcomes tied to nature, including; improvements in mood and anxiety, cardiovascular disease, and even short- and long-term outcomes relating to cancer¹.

This allied with the potential to develop 'green' energy production such as wind and solar, and opportunities to enhance biodiversity and establish new habitats all contribute to the creation of a more sustainable society.

1 Kuo, M., 2015. How might contact with nature promote human health? Promising mechanisms and a possible central pathway. Frontiers in psychology, p.1093.



Land Use Opportunities Report



What are the financial benefits of green spaces?

Investment in green infrastructure can create and maintain employment in a range of rural industries, such as forestry, land management and conservation. These link with economic activities such as tourism and leisure, traditional country sports and the growing natural tourism sector.

The functions and benefits of green spaces and investment can be considered as follows:

Function

Biodiversity – This is a major function in green space investment as it can encompass both rural and urban resources and therefore underpins much of the national, regional and local development plan policy.

Access – Access and movement are a key driver of the development of green corridors and is closely aligned to the public rights of way network and areas designated with the right to roam.

Water Management – A key element in green space and green investment, particularly in projects such as wetland creation, is regulation of the water system. These do not only need to be within rural areas, but also in development areas through policy such as requirements to comply with mandatory national standards for sustainable drainage (SuDS). Management of runoff from both development and rural land can reduce flows, increase percolation, capture carbon and reduce flood risks.

Tourism - Seen as an increasingly important economic sector within The Marches through the emphasis on its natural and heritage assets.

Benefit

Education, Health and Wellbeing, Quality of place, protection of the environment.

Health and Wellbeing, Tourism, Education, Biodiversity.

Flood alleviation, Climate Change adaptation, possible increase in land values, Health and Wellbeing, Biodiversity.

Economic growth and investment, heritage and cultural assets.

Land Use Opportunities Report

Function

Community – The engagement with the community in terms of understanding their aspirations and interests is key to the successful implementation of green investment. It is important to clarify the gains against the perceived changes in the environment.

Education - Green space development provides an important vehicle to ensure the community sees the gains from education, particularly using the green space resource. This will build upon the extensive effort with regard to greening schools and the resultant educational benefits.

Climate resilience – Increasingly unpredictable weather patterns as a result of climate change creates greater uncertainty, particularly around temperatures and rainfall. Green investment can help to create greater climate through regulating water flows (e.g. through tree planting and wetland creation) and regulate temperatures around developed areas.

Sustainable economy – With a growing emphasis on clean energy production and energy security for the UK, renewable energy production provides an opportunity to sell energy back to the National Grid. Green investment can also assist businesses in reducing energy costs whilst reducing their carbon footprint.

Health and Wellbeing – Green investment can encourage local communities to visit green spaces and engage with nature. This can improve visitor's physical and mental health, particularly if encouraged to visit or volunteer to help with activities such as woodland planting.

Benefit

Health and Wellbeing, Education, Quality and Sense of Place.

Economic growth and investment, Quality of Place, improved environmental health.

Climate resilience, Biodiversity, Health and Wellbeing.

Economic growth and investment, reduced carbon footprints, greater energy security, ability to attract businesses to the area.

Improved physical and mental health, Education.



2 METHODOLOGY

The method for this study has included a weighted suitability analysis to identify locations of land use opportunity for change to woodland, solar and wind energy generation (full details of the analysis can be found in the technical appendix available at <u>https://www.marcheslep.org.uk/priorities/data-research/</u>. This method utilised Ordnance Survey Mastermap data to identify the current land use classification of each area of The Marches and formed the basis of the analysis (Map 2 and 3). It should be noted that this study has used purchased and publicly available data, which is current at the time of analysis, therefore any decision to pursue land use opportunities for change to woodland and renewable energies should be checked against the latest available baseline data (technical appendix, Table 3).



STAGE 1: CONSULTATION, CRITERIA AND TYPOLOGIES

The criteria for the analysis was decided in consultation with the Marches Local Enterprise Partnership and the Marches Nature Partnership. The analysis only utilised datasets with coverage over Shropshire, Herefordshire and Telford & Wrekin (as a minimum). The Primary Typologies (broad land use classification) and Secondary Typologies (detailed land use classification) were classified from Ordnance Survey Mastermap data to extract the proportion of each Primary Typology in the Marches as part of the assessment of existing land use.



STAGE 2: DATA SOURCES AND DATA COLLECTION





For the assessment of land us opportunity, the Secondary Typologies previously identified were scored based on their suitability/ ease of land use change to woodland and renewable energies (solar and wind). The datasets collected to resemble each criteria are the constraints in this analysis which were scored for woodland, solar and wind individually. The suitability score combined with the constraint score (the quotient) formed the final outputs which indicate the land use opportunities for woodland, solar and wind across the Marches.

Solar

Wind

Woodland

Flow diagram of main project stages.



Criteria/ constraint	Woodland	Solar	Wind	
Distance from public rights of way (PRoW)			-	
Distance from road (road is set as 20m wide and only includes motorways and A roads)	•	•	-	
Distance from substations (only substations with an aggregated generation headroom of green or amber were included)			-	
Flood zones				
Greenspaces				
Index of Multiple Deprivation (IMD) Decile (where 1 is most deprived 10% of Lower layer Super Output Areas (LSOAs))				
Intervisibility				

Criteria/ constraint	Woodland	Solar	Wind	
Riparian zone (10m buffer applied to river line data to resemble the riparian zone)	•	•	•	
Listed buildings (5m buffer applied to the point data)	•			
National Trust land				
Parks and gardens				
Prominence				
Scheduled Monuments				
Slope				
Wind speed (50m above ground level)				
World Heritage Sites				

Table 3: The criteria included as constraints for woodland planting and development of solar and wind.

A full technical methodology detailing the assessment approach, assumptions, and criteria for the assessment can be viewed at <u>https://</u> www.marcheslep.org.uk/priorities/data-research/.

Land Use Opportunities Report

2.1 ASSUMPTIONS

The following assumptions have been made when carrying out the assessment as detailed previously.

- » This is a baseline illustrative study of the opportunity for land use change within the Marches.
- » The Marches is on the border with Wales. Where data was available for outside of The Marches, a 25km buffer outside of the boundary was used as the extent (e.g. data regarding the location of roads).
- » When assessing renewable energy opportunity, substation capacity is identified for your information, however, the assessment takes into account the potential for battery power storage for solar power.
- » When assessing solar energy, the focus of the assessment was on open land and brownfield sites. The study has not taken into account the opportunities for the installation of Photovoltaic (PV) panels in urban/built up areas and or on buildings.
- » This assessment does not consider land ownership (except for the National Trust), plot sizes, or ownership boundaries. Council owned land is highlighted on larger scale maps for your information available to view at <u>https://www.marcheslep.org.</u>uk/priorities/data-research/.





3 LAND USE ASSESSMENT

3.1 EXISTING LAND USE ASSESSMENT

In order to identify the land use opportunities within The Marches study area. The existing land use was mapped using OS Mastermap Land Use classifications. The full method of analysis is presented in the accompanying technical appendix available at <u>https://www.marcheslep.org.uk/priorities/data-research/</u>. The following maps present the current land use (at the time of assessment) of The Marches. A digital version of this map data is available at <u>https://bit.ly/LEP-LandType</u>.

The infographic presents the % cover of each land use classification within the study area. Maps 2 and 3 visually represent the current land uses within The Marches. Visit **https://www.marcheslep.org.uk/priorities/data-research/** for more detailed maps.

The current land use data was used as part of the Land Use Opportunities assessment presented below.









3.2 LAND USE OPPORTUNITIES

The following maps show the outcome of the Land Use Opportunity analysis split by Local Authority. These maps identify areas with the largest opportunity for change based on the three opportunities of solar energy, wind energy, and woodland creation.

It should be noted that all areas including areas identified as having the highest levels of opportunity would still be subject to a full planning review, the planning process and detailed design including any environmental assessment as required. Opportunities identified do not guarantee planning approval.

Solar Energy Opportunity

The following maps show the level of opportunity for solar energy in Shropshire, Telford & Wrekin, and Herefordshire respectively. The greatest opportunity for solar power is shown to be within northern and eastern Shropshire and Telford & Wrekin, there is less opportunity within Herefordshire. The opportunity presented includes the potential for battery power storage. The capacity of National Grid sub stations is shown on the map to indicate where, for example, if a larger solar farm was to be connected to the National Grid, substation capacity would need to be taken into consideration, along with any accommodating works to increase capacity. Whilst the map indicates a lower opportunity in Herefordshire than Shropshire and Telford & Wrekin, there are still many locations with High and Medium levels of opportunity for solar energy generation. Very low opportunity does not mean no opportunity.

To identify opportunity at a more detailed scale and specific areas for development, maps can be viewed at <u>https://www.marcheslep.org.uk/priorities/data-research/</u> and an interactive map at <u>https://bit.ly/LEP-Solar</u>.

This map considers solar opportunity levels on green and brownfield sites, the areas indicated as being unsuitable are the urban and built-up areas. This map does not show the opportunity for solar power installed on buildings and rooftops as most buildings have the opportunity to install some solar energy, particularly if utilising battery storage. This should be considered when looking at opportunities for solar power generation for personal or business use.







Land Use Opportunities Report

Wind Energy Opportunity

The following maps show the level of opportunity for wind energy in Shropshire, Telford & Wrekin, and Herefordshire respectively. The map shows broad areas of High and Very High opportunity for wind power generation. The greatest opportunity for wind power is shown to be within Shropshire and Telford & Wrekin, there is less opportunity within Herefordshire. Despite the physical land characteristics in Herefordshire being suitable, local designations and National Grid substation capacity are the main constraints in this area. All substations in Herefordshire have Low or no capacity at the time of the assessment. As wind power on a larger scale, typically feeds back into the National Grid, the opportunities are far lower for a larger scale operation. However, there are small pockets with High or Very High opportunity, these areas could be more suited to individual turbine installation for personal or business use.

To identify opportunity at a more detailed scale and specific areas for development, maps can be viewed at <u>https://www.marcheslep.org.uk/priorities/data-research/</u> and an interactive map at <u>https://bit.ly/LEP-Wind</u>.









Woodland Creation Opportunity

The following maps show the level of opportunity for woodland creation in Shropshire, Telford & Wrekin, and Herefordshire respectively. It indicates that the Marches as a whole has a great opportunity for woodland creation based on the study criteria. The areas with lower opportunities are mostly the built-up areas or locally designated wildlife sites that are priority habitats in their current state. The largest constraints are designations, but the assessment also takes into account accessibility of potential new woodlands for the public. The assessment takes account of proximity to PRoW and active travel routes with the aim of encouraging visitors via active travel to new woodlands to improve public health and wellbeing, but to also encourage visitors to surrounding areas. This in turn would contribute to local economies and potentially increase trade for local businesses.

To identify opportunity at a more detailed scale and specific areas for development, maps can be viewed at <u>https://www.marcheslep.org.uk/priorities/data-research/</u> and an interactive map at <u>https://bit.ly/LEP-Wood</u>.

Biodiversity Net Gain (BNG)

When considering opportunities for the creation of new woodland areas, it is important to consider the local biodiversity. It is not favourable to create a monoculture of a single species, that is not what is being proposed through this study. Any woodland creation should consider a wide range of native species, creating diverse habitats for the benefit of local nature and residents. This can be utilised to work towards local and national policy and targets, and sequester carbon to the benefit of all.

There is potential for local developments, small scale or large, to utilise these opportunities to achieve the mandatory 10% Biodiversity Net Gain for any new developments in England under the Environment Act 2021. For land managers, there is also potential to utilise these areas to create and sell biodiversity units to developers to help achieve this BNG target. Based on Defra consultation and guidance, these units could be sold for between **£9,000** and **£15,000** per biodiversity unit², opening the door to diversify income streams.

Further information on understanding Biodiversity Net Gain can be accessed through Defra Guidance at: **Understanding biodiversity net gain - GOV.UK** (www.gov.uk)

² Net gain Consultation proposals (defra.gov.uk)





3.3 SUMMARY CONCLUSIONS

In summary, the Marches LEP and Marches Nature Partnership recognise the abundant potential for alternative land use throughout the Marches. This study demonstrates that renewable energy generation and woodland creation offer significant opportunities across the region, highlighting north Shropshire as the area of greatest opportunity. Certain constraints, such as limited substation capacity, have affected renewable energy prospects, particularly in Herefordshire. However, this does not mean that there are no opportunities for renewable energy generation within the Local Authority area. Exploring additional possibilities such as Biodiversity Net Gain and integrated wetland creation for future land-use opportunities within the Marches should also be considered going forward.



4 NATURE BASED INVESTMENT

4.1 AREAS WITH GREATEST OPPORTUNITY

The following sections present examples of locations highlighted by the study with the greatest potential for each of the three alternative Land Use Opportunities. This prospectus is intended to signpost and promote opportunities to encourage investors to engage in dialogue. These are illustrative examples to highlight how the maps in this study can be used to plan future developments and opportunities for green investment.

The examples shown do not consider land ownership and would be subject to environmental and planning considerations. They would also require

consultation with relevant statutory bodies and stakeholders. They are designed to illustrate how a project could be taken forward following the findings of this study.

To identify the level of opportunities on land that you own or manage, use the maps available to view at <u>https://www.marcheslep.org.uk/priorities/</u> <u>data-research/</u> and interactive maps at: <u>Solar (https://bit.ly/LEP-Solar),</u> <u>Wind(https://bit.ly/LEP-Wind)</u> and <u>Woodland https://bit.ly/LEP-Wood</u>.



Solar Energy Opportunity

When considering a solar energy generation development, the height, massing and pattern of solar panels and associated infrastructure are key attributes. This study categorises area sizes as the following:

Small Array	Medium Array	Large Array	Very Large Array
= <10 hectares	= 11-20 hectares	= 21-30 hectares	= 31+ hectares

Location

A stretch of land along the A442 between Allscot and Telford has been identified as having Very High opportunity for solar energy production (Map 10). The area, predominantly farmland, is largely flat and easily accessible via the adjacent A-road. Additionally, the three nearest National Grid substations each have high levels of capacity, providing greater opportunity for a larger scale solar energy project.

Project Size

Based on information provided by the Renewable Energy Hub UK³, for every 5 megawatts (MW) of power, approximately 10 hectares of land is required. There are multiple opportunities for a variety of different sized solar farms in this location. From smaller scale 1MW farm requiring approximately 2.5-3 hectares, to slightly larger 5MW farms with the potential for farms to produce in excess of 20MW. A 5MW farm typically produces enough energy to power over 1,350 homes, saving 1,200 tonnes of carbon a year in the process.

³ The Renewable Energy Hub UK, 2023, Everything You Need to Know About Solar Farm Requirements, Available at: <u>https://www.renewableenergyhub.</u> <u>co.uk/blog/everything-you-need-to-know-about-solar-farm-requirements</u>





Land Use Opportunities Report

Solar Energy Opportunity

Grants and funding

The cost of installing and maintain a solar farm can vary considerably depending on size, location and resource availability. There is limited grant funding available for solar energy beyond home installation. Grant funding for larger scale projects is limited, with private sector finance and banks willing to invest in renewables due to the certainty on returns, and private sector finance or bank loans can provide alternative start-up cost provisions.

The cost of purchasing and installing a solar energy generation project can vary drastically depending on size, the number of panels, and location. They can range from a small scale 4kW agricultural solar farm project costing approximately £4,000, to an 800 panel 200kW system costing approximately £180,000⁴, and in potential excess of £5 million for a 5MW solar farm.

These costs are estimates at the time of writing and are indicative only.

Further information on available funding may be viewed at:

https://www.marcheslep.org.uk/priorities/data-research/

4 SunStore UK, 2023, Solar Farm Power, Available at: <u>https://www.sunstore.co.uk/solar-power/solar-power-for-farms/</u>





Lessons Learned

The location of PV panels is essential. The installation went on an old roof, which required several roof sheets to be replaced before installation.

Consideration needs to be given to whether any accommodating works need to be carried out and costs taken into account before installing the system.

Costs

The costs of purchasing and installation based on 2023 pricing are estimated at £50k-£60k. Costs vary.

No grant funding was used for this project. Grant funding for larger scale projects is limited, with private sector finance and banks willing to invest in renewables, private sector finance or bank loans can provide alternative start-up cost provisions.

Timeline

Payback times for PV panels = <5 years Payback times for Air Source Heat Pumps = 7 years (based on 2023 pricing)

Benefits



Financial

With the success and savings made from the installation, consideration is being given to upgrading to a battery system in the future. This will enable the business to store and use energy at all times of the day.



Environmental

As a result of the installation, Newton Court has been awarded an 'A' Star rating for energy efficiency, keeping running costs at an absolute minimum and reducing reliance on grid power and fossil fuels, something that Paul is extremely proud of.

It is estimated that a 30kW system has a **CO2 saving of ~6 tonnes.**

Description

The 63.5 hectares Newton Court organic farm has built a reputation for producing over 80,000 litres of cider each year. Alongside cider production, Newton Court has a new visitor centre, restaurant, kitchen, and shop. This results in extremely high energy usage. It was very important to director Paul Stephens that the business focused on sustainable farming practices. In addition to the energy crisis driving high energy costs, renewable energy becomes the obvious choice whilst maintaining the businesses core values.

With the help of Caplor Energy, a 30kW solar photovoltaic (PV) system was installed on one of the barns that feeds into the existing power supply in order to run all electricity requirements throughout the site.

In addition, underfloor heating throughout the new restaurant, café and farm shop building was installed. These are now powered by two 15kw air source heat pumps (powered in turn where possible through the PV system) that link to a new hot water cylinder, further reducing reliance on fossil fuels.

Wind Energy Investment Opportunity

When considering a wind energy generation development, the height, number, and density of the turbines are all key attributes. The area requirements for the varying sized turbines can be categorised as:

Very Large	Large	Medium	Small
Tip height 181m to 250 metres at spacing of 90 hectares per turbine.	Tip height 151m to 180 metres at spacing of 24 hectares per turbine.	Tip height 121m to 150 metres at spacing of 24 hectares per turbine.	Tip height less than or equal to 120 metres at spacing of 20 hectares per turbine

The size the development can range from a single turbine to a large group of 7-10 turbines. Two examples of different sized developments are presented in this prospectus.



Wind Energy Investment Opportunity

Location #1

The first area for opportunity is west of Cleobury Mortimer in southeast Shropshire, adjacent to the A4117 (see Map 11). This is a broad area identified as having a Very High opportunity for wind power generation. Predominantly farmland, the open landscape lends itself well to wind energy production with easy access via the A-road, and close to a substation with high capacity.

Project Size #1

At this location, it could be possible install up to 5 small, medium or large turbines. Onshore wind turbines on average create around 3MW, meaning that 5 wind turbines in this area could produce an output of 15MW. This has the potential to generate enough renewable energy to power almost 10,000 homes annually⁵.

Location #2

A second area for opportunity (see Map 12) is in north Shropshire where there are several locations with Very High opportunity. A sprawling area around Whitchurch, Tilstock and Prees has ample opportunity. Predominantly farmland, these areas can be accessed via the A49 and A41 and has multiple substations in the vicinity all with medium capacity levels.

Project Size #2

It is not being suggested that this entire area is developed as a wind farm but identifies the area for its high levels of suitability and opportunity. This area may lend itself to multiple small-scale projects by landowners and land managers ranging from 1 to 3 small turbines. Assuming a maximum power output of 3MW per turbine, a project with 1-3 turbines has the potential to generate enough renewable energy to power between an estimated 1,900 – 6,000 homes annually.

Grants and funding

The cost of purchase and installation of a wind energy project varies considerably depending on factors including the size of turbine, the number of turbines, the location, and the provider to name a few. Costings can be in the region or £40,500 for a small 10-kilowatt (kW) project, and in excess of £1.25 million for projects sized over 1MW.⁶

These costs are estimates at the time of writing and are indicative only.

There are currently no national scale grants of funds for wind power systems. There may however be some regional funding for community wind projects.

⁵ Renewable UK, 2023, Wind Energy Statistics Explained, Available at: https://www.renewableuk.com/page/UKWEDExplained/Statistics-Explained.htm

⁶ Renewables First, 2023, How much does a wind turbine cost?, Available at: <u>https://www.renewablesfirst.co.uk/renewable-energy-technologies/windpower/windpower-learning-centre/how-much-does-a-wind-tur-bine-cost/</u>





A look at woodland finance 10 hectare site

Name:	Anonymised financial case study: broadleaved woodland
Size:	10 hectare site
Location:	North-East England

When looking to understand the value woodland can bring, it's important to recognise the variables that influence income. These factors include woodland type, species, growth rate, spacing, rotation length, size, and the location of your woodland – all of which can vary considerably resulting in several possible combinations and outcomes. This real-life example of a woodland creation scheme demonstrates how the landowner created woodland to benefit the planet, while generating income.

Description

The owner of the farm comprising of grass meadows, previously sheep and cattle grazed, aspired to transform it into a green energy hub with the long-term goal of enhancing the local landscape, improving biodiversity, and leaving future generations with a better, cleaner, planet. Funding through the Woodland Creation Planning Grant (WCPG) and England Woodland Creation Offer (EWCO) was secured to create diverse mixed-species woodland by planting 20.100 new trees.

Endnote: This is an overview of the Forestry Commission's financial case study which should be read for the full context. All figures are rounded to the nearest £100 and are accurate as of February 2023. Discount rates have been applied.

Woodland Creation: Financial case study, 10 hectare site - GOV.UK (<u>www.gov.uk</u>)

Timeline

The income and costs for this example have been calculated over a 50-year period, though it is important to note that some finances impact a shorter duration of this period. Full details can be found on GOV.UK.

Funding

The project will receive a total of £163,900 in grant payments over 10 years, broken down into;

- » WCPG: £2,100 to help cover the cost of producing a UK Forestry Standard complaint woodland creation design.
- » **EWCO Standard Costs:** £81,500 to help with the costs associated with creating the woodland.
- **EWCO Additional Contributions:** extra stackable payments for woodland projects that provide wider benefits to people and the environment. Included payments for: Nature Recovery (£15,100), Recreational Access (£17,300), and Close to Settlements (£6,800).
- » EWCO Maintenance Payment: £41,100 over 10 years.

Benefits



Over the 50-year period, the scheme will bring in an overall net income of £85,100 (£6,200 per ha) at present value. Agricultural income foregone (calculated using the income from the Farm Business Survey for England and Wales) in this scenario would be £63,200 (£4,600 per ha), showing a £21,900 increase in income over the 50-year period, when compared to the previous agricultural activity. This shows how a change in land use to woodland creation can benefit a business' finances.



Environmental

The new species-diverse woodland will integrate with hedgerows and existing trees on the land. A network of paths and access routes will be created making the woodland available for public enjoyment, with hopes to benefit visitors' physical and mental wellbeing. Further, the scheme is estimated to produce 3.160 Woodland Carbon Units (WCUs) over 50-year the period.

Land Use Opportunities Report



Woodland Creation Investment Opportunity

Location

An area to the west of Kington, Herefordshire, along the England-Wales border has been identified as having a Very High level of opportunity for woodland creation (Map 13). The area spanning into and adjoining Hergest Ridge Common and Hergest Ridge Estate has the potential to expand and tie-in with existing woodland, and walking trails. Hergest Ridge is a popular visitor destination for walkers and cyclists, with easy access via the walking centre and nearby Kington, Woodland creation in this area could provide an opportunity for local collaboration and volunteering to help promote the space to residents, which in turn can improve health and wellbeing.

Project Size

The area identified as having very high opportunity spans approximately 150 hectares. While it is not recommended that this whole area be converted into woodland, it highlights the potential for multiple smaller scale interconnected woodland projects across this area. There is also potential for larger woodland plot creation, this site could potentially support a 20-hectare block of woodland creation.



Map 13: Woodland Creation Investment Opportunity



Environment Appropring and de tababae right 2020 All rights reserved. Contains paids sector information lensmed under the Open Government Lenser 20.0 Contain data provide by Dorphonis. Triffed de tababae right 2020 All rights reserved. De tababae right 2020. Centains of the provide by Intervelibre Integrated 2020. Centains Orden nors: A provide and Centains: A provide and A provide an

Woodland Creation Investment Opportunity

Grants and funding

There are multiple grant funding opportunities that could be utilised for the creation of woodland in this area. The below table identifies examples of funding and where they can be accessed.

Funding	Access via:	Amount available
Severn Woodlands Creation Grant Scheme	www.severnriverstrust.com/projects/srts- severn-woodlands-creation-grant-scheme	Up to £5,000/ha
Forestry Commission - Woodland Creation Planning Grant (WCPG)	www.gov.uk/guidance/woodland-creation- planning-grant	Up to £30,000 per project. £1000 - Woodland creation design Plan payment £150/ha (minus design payment)
Forestry Commission - England Woodland Creation Offer (EWCO)	<u>www.gov.uk/guidance/england-woodland-</u> creation-offer	Up to £10,200 per hectare, plus up to a further £8,000 per hectare in Additional Contributions for the value the woodland brings to the environment, nature recovery, and the community. Maintenance payments of £350 per hectare for 10 years.

Information correct at the time of writing. Check prior to applying.

Additionally, further information on available funding may be viewed at <u>https://www.marcheslep.org.uk/priorities/data-research/</u> and Marches Growth Hub: Green Grants and Funding - Marches Growth Hub.

Shropshire Homes

Oswestry Road Development

Name:	Shropshire Homes
Location:	Oswestry Road, Ellesmere, Shropshire

Costs

The total cost for the implementation, management, and monitoring of BNG on-site are currently unknown. However, based on the metric calculations, if statutory biodiversity credits were purchased to cover the BNG requirements rather than creating them on-site, it is estimated that it could cost an additional £1.2 million.

Further information on statutory biodiversity credits is available at:

https://www.gov.uk/guidance/statutorybiodiversity-credit-prices

Timeline

The site has three key BNG areas. Two will be implemented by April 2025, with the implementation of the final area being completed by April 2026.

Additionally, a 30-year management and monitoring plan has been produced to ensure the BNG improvements are maintained.

Description

The development of 107 new build homes in North Shropshire is being undertaken by Shropshire Homes. As part of the development, a 10% Biodiversity Net Gain (BNG) is required by the local authority. Whilst the legal requirement for 10% BNG under the Environment Act 2021 will apply from November 2023 (unless exempt), many local authorities have already implemented this requirement.

The project used Biodiversity Metric V3.1, the most recent version at the time of assessment, to calculate the development's BNG status.

The main biodiversity aims for the projects are:

- » Establish and then maintain medium distinctiveness neutral grassland areas.
- » Create fenced-off biodiversity enhancement 'nature areas'.
- » Establish a pond within the western nature area for the benefit of wildlife.
- » Establish a SuDS attenuation basin that increases the site's biodiversity value.
- » Protect hedgerow and mature tree resources along field boundaries.

Through design and management plans and using the metric, a 28% positive net change on site was calculated, surpassing the 10% requirement. This is largely due to the existing conditions classified as agriculturally improved grassland and species-poor (less than 6 species per m2). On-site BNG is the most desirable outcome compared to off-site improvements or purchasing BNG units.



Benefits



- » On-site BNG removed the cost of purchasing off-site units or statutory credits.
- » Potential for excess biodiversity units to be create and sold for other projects.



- » Improve wildlife and ecosystem resilience.
- » Work towards regional and national biodiversity targets.
- » Assist flood management.
- » Improve local air quality.
- » Improve green infrastructure and provide on site nature benefits for the end users



Further opportunities

This indicative study begins to highlight opportunities for alternative land use within The Marches, but these are not limited to renewable energy generation. The information below identifies additional considerations for green investment and alternative land use.

Biodiversity Net Gain

Biodiversity is key for a healthy and resilient habitat. Biodiversity Net Gain (BNG) is an approach to land management and development, that aims to leave the natural environment in a measurably better state than it was beforehand. In England, the Environment Act 2021 sets out a mandatory 10% Biodiversity Net Gain requirement for new developments. For land managers, there is potential to utilise managed to increase their biodiversity to create and sell biodiversity units to developers to help achieve this BNG target. Based on DEFRA consultation and guidance, these units could be sold for between **£9,000** and **£15,000** per biodiversity unit, opening the door to diversify income streams.

Further information on understanding Biodiversity Net Gain can be accessed through DEFRA Guidance at: **Understanding biodiversity net gain - GOV.UK** (www.gov.uk)

Biomass/Biochar

Biomass, including wood chips and pellets, bioenergy crops or even agricultural waste can be utilised to generate a renewable source of energy. Alternatively, waste organic matter can be utilised to create biochar. Biochar is any organic matter that has been carbonised via a process called pyrolysis under high temperatures. This can then be sold or used to help manage soil nutrient levels, providing improved water and nutrient retention, and can also be used to generate electricity through the heating process.

WoodTek

Solutions for the production of Biochar and C-Sink Carbon Credits

Name:

WoodTek – Solutions for the production of Biochar and C-Sink Carbon Credits

Location: Welshpool

Description

Biochar is a carbon rich, sustainable form of charcoal made from organic matter, such as agricultural crop residues, wood waste and animal manure. It is produced using a high heat low oxygen burning process called pyrolysis.

Biochar is carbon negative as it stores more carbon than is emitted in its production. The production process produces biochar, oils, gasses and heat. In this pyrolysis unit the oils and gasses are burnt to generate electricity. Biochar has a range of beneficial uses such as being very effective at retaining water-soluble nutrients in soils or being a carbon negative material for use in building materials or alternatives to plastic.

Pyrolysis systems can be operated remotely and are designed to work 24 hours a day with very few periods of down time – around 8000 hours per year is typical.

Heat generated by the pyrolysis process and waste heat from electricity generation can be used to dry the incoming feedstock and could be used to heat buildings or water.

Costs

Biochar plant base model (C-1000 CHP Biochar plant - Electratherm PM75).

- » Cost = £1,184,300
- » Annual net income ≈ £214,500

Dual Biochar plant (Dual C-1000 CHP Biochar plant - Dual Electratherm PM75).

- » Cost = £1,966,820
- » Annual net income ≈ £521,000

Timeline

Return on investment is approximately 3-5 years depending on the Biochar Plant base model purchased.

Benefits

Financial

- As carbon is permanently removed through the process it is possible for carbon credits to be sold. The carbon credit market is expected to grow exponentially in the next 10 years. The carbon credit market value increased from £30 to £132 from 2020 to 2022.
- » Biochar can also be sold. Wholesale rates are around £600 per tonne but, mixed with compost or raw, horticultural rates are far higher.
- » Excess heat or electricity can be sold to the grid or to neighbours via a private wire.



Environmental

- » Produces clean heat and power.
- » Around 2.5 tonnes of carbon dioxide can be permanently removed from the atmosphere via the carbon sequestered from a tonne of biochar.
- Biochar can improve soil quality including fertility, nutrient levels, moisture, and PH.
- Biochar can improve agricultural yields, especially in degraded soils.
- The process uses tried and tested technology that is similar to biomass boilers.



Further opportunities

Wetland Creation

Wetlands are sustainable natural systems and can be created to achieve a number of benefits. Where integrated wetlands are designed and created effectively, they can be utilised to manage river nutrient levels, act as natural flood management, sequester carbon, and enhance biodiversity, presenting the potential to create and sell biodiversity units as highlighted previously. They can even be employed to treat wastewater by providing a natural and cost-effective way of removing nutrients. They can similarly be used to help manage excess nutrient runoff from agricultural land. This ties in to studies being undertaken by the Severn Partnership looking at the management of wetlands and river basins to manage and reduce future flooding and drought scenarios within the Marches and adjacent counties.

Brook Vessons

Alternative Land Management

Name:Brook Vessons - Alternative
Land ManagementsLocation:Within the Shropshire Hills AONB



Costs

- » Approximately **£10,000** invested in pond creation and land re-wetting, as well as some landscape enhancements,
- » Costs for the purchase of the farm are not reported in this case study.
- » The total costs of tree planting is unclear as it has been undertaken over 12 years.
- » No grant funding was used to complete the work. The owner noted that had they relied on grant funding, the progress made would likely be several years behind where it is today.

Lessons Learned

It was identified that farmers can be wary of grant funding with some schemes in the past claiming to be "open-ended" but subsequently ceasing leaving farmers with unexpected ongoing costs.

The holistic approach to sustainable farming shown at Brook Vessons with environmental restoration, property redevelopment, and support for local businesses serves shows a well-rounded example model for landowners seeking to make a positive impact on both the environment and their communities

Benefits



Financial

Whilst there are limited financial benefits gained for woodland, pond and wetland creation, this case study highlights how economic enterprises can be achieved alongside land management and farming practices that benefit the local environment, nature, and biodiversity.



Environmental

Integrated farming practices with livestock grazing amongst the woodland increase local biodiversity. Wetland creation and tree planting help to manage water flows, promote carbon sequestration, manage watercourse nutrient levels downstream, and increase local biodiversity.

Description

This case study presents the ambitious work that has been done at Brook Vessons farm to utilise alternative farmland management approaches for nature recovery and biodiversity enhancement. Initially, a 25ha portion of the working farm was purchased by the current owner to plant trees and teach future generations about nature and its benefits, as well as a way to give back to nature. In 2020 the whole 155ha farm was purchased to help restore natural processes in areas of the farm whilst continuing to use the farm to graze livestock.

Works undertaken include:

- » Tree Planting Approximately 5,000 trees have been planted over the last 12 years incorporating agroforestry practices to the farm outputs. This includes the creation of a 150-tree Heritage Orchard including Perry Pears for juicing and cider/perry production and quinces.
- » Re-wetting With support from the Forestry Commission, successfully diverting a rerouted steam back through the farmland, blocking drainage ditches and the creation of a series of ponds and scrapes has resulted in the hydrological restoration of 15.6ha of grassland and rush pasture.

» Further information at: <u>https://www.</u> <u>shropshirehillsaonb.co.uk/Documents/Brook%20</u> <u>Vessons%20Case%20Study%20191121.pdf</u>

- Farm Diversification and supporting local businesses – The owner sought to collaborate with young entrepreneurs interested in sustainable farming. He is supporting local enterprises like "Mossy Oaks," a nature-let smallholding producing goat dairy produce, and pasture and woodland-raised pork, whilst supporting land restoration and utilising the animals to assist in sustainable land management practices.
 - » Further information at: <u>https://mossyoaks.</u> <u>co.uk/</u>

GRANT FUNDING OPPORTUNITIES

To assist with the realisation of green and renewable projects, current grant funding opportunities can be searched for through the below websites:

Grand and Funding Finder	Available at:
The Marches LEP Government Funding Tracker	<u>https://www.marcheslep.org.uk/our-funding/</u> funding-tracker/
The Marches Growth Hub Support Finder	<u>https://www.marchesgrowthhub.co.uk/</u> <u>support/</u>
Grants Online	https://www.grantsonline.org.uk/
Grant Finder	https://www.grantfinder.co.uk/
Get Grants – Funding Finder	https://www.getgrants.org.uk/funding-finder/
Countryside Stewardship grant finder	<u>https://www.gov.uk/countryside-</u> <u>stewardship-grants</u>
Find a grant (GOV.UK)	<u>https://www.find-government-grants.service.</u> gov.uk/_
Farming Resilience Fund: free business advice for your farm (GOV.UK)	<u>https://www.gov.uk/government/</u> publications/get-free-business-advice-for- your-farm/organisations-giving-free-advice- in-your-area-listed-by-county

A reference table specifying grant funding, their provider, the amount available and requirements to access the funding can be viewed at <u>https://www.marcheslep.org.uk/</u>priorities/data-research/.

For further information on wider Zero-carbon opportunities and funding (e.g. public sector funding or business advice and support) please visit: **Zero Carbon Opportunities** (<u>shropshire.</u> <u>gov.uk</u>).

For SMEs from all sectors within The Marches, to access free advice, energy assessments and grants for energy efficiency and renewable energy measures, please visit The Marches **Energy Grant** website. Eligibility requirements do apply.

4.2 Further Considerations and Next Steps

Expanding on the opportunities highlighted within The Marches through this study, it is important to outline the next steps and considerations necessary to utilise the alternative Land Use Opportunities identified. The following points explore these considerations and suggest a roadmap for future actions.

01	Conduct a more focused and detailed analysis including assessing the size of connected land parcels and understanding land ownership in specific opportunity locations within The Marches.
02	Explore the need for future investment in substation or power storage capacity, particularly in Herefordshire, if Local Authorities in The Marches intend to pursue future renewable energy sources.
03	Consider hydrological impacts and opportunities for land use change. Severn Trent Water is conducting a study within The Marches and neighbouring counties to explore water-related opportunities and challenges.
04	Explore opportunities for integrated wetland creation and alternative nature-based water management with the potential to incorporate these with existing wetland projects. These could focus on enhancing biodiversity, water and nutrient/phosphate management, and carbon sequestration.
05	Explore the solar energy potential of existing buildings within the region.
06	Consider establishing an investment panel or committee to actively monitor and evaluate future opportunities arising from the study findings.
07	Explore the possibility of forming investment groups for each topic area, such as woodland creation, renewable energy generation, agriculture, etc. These groups should engage a diverse range of stakeholders, including farmers, landowners, energy providers, local community groups, and governmental bodies to share opportunities and support to pursue projects.
80	Evaluate the potential for establishing a dedicated Marches Biodiversity Net Gain (BNG) mechanism, aimed at efficiently channelling available financial resources, bringing together land-owning interests, and addressing planning-related issues and potential barriers in a streamlined manner.

List of Abbreviations

Abbreviation	Full Description
Marches LEP	Marches Local Enterprise Partnership
MNP	Marches Nature Partnership
PRoW	Public Right of Way
SuDs	Sustainable Urban Drainage System
BNG	Biodiversity Net Gain
DEFRA	Department for Environment, Food and Rural Affairs
Pv	Photovoltaic
MW	Megawatt
SME	Small and Medium Enterprise

Appendices

Appendices can be found at:

www.marcheslep.org.uk/priorities/data-research



www.marchesgrowthhub.co.uk

www.marcheslep.org.uk



Prepared by TACP (UK) Ltd for The Marches Local Enterprise Partnership

