ECU Reference: ECU00002001 Clauchrie Windfarm.

Proposal for the erection of 18 wind turbines up to 200m height to tip with a combined rated output of 200 MW and up to 25 MW of battery storage on land within South Ayrshire Council area and associated access infrastructure within Dumfries and Galloway Council area.

Galloway and Southern Ayrshire Biosphere Partnership Board objects to the proposed development on the grounds of the landscape and visual effects on the core and buffer area of the UNESCO Biosphere and the consequential adverse effect on local tourism and sense of place.

1. Galloway and Southern Ayrshire UNESCO Biosphere

The Galloway and Southern Ayrshire UNESCO Biosphere Board represent a broad partnership of public, private and community interests focused on supporting sustainable development that benefits local communities and the natural environment. These members guide delivery of the UNESCO Biosphere Strategic Plan.

The Partnership Board recognises and supports the Scottish Governments ambitious targets on energy production through renewable technologies and acknowledges that an integrated energy production framework is essential in achieving Scotland's ambitions.

Windfarms both onshore and offshore play a key role within the energy generation mix and the South of Scotland has seen in recent times a proliferation of windfarm developments to support the national objective.

The Galloway and Southern Ayrshire UNESCO Biosphere supports a balanced approach to development locally ensuring that developments are sustainable and suitable for the local environment and communities. It also recognises that the UNESCO Biosphere area has assets within it which require significant protection from the impacts of wind farm development these include, wild land, carbon rich soils, Natura 2000 sites/SSSI's, designed landscapes/historic battlefields.

It is the view of Galloway and Southern Ayrshire UNESCO Biosphere Partnership that any wind farm developments within the Core and Buffer zone of the Biosphere would not be suitable or supported due to their adverse impact on the region's natural environment, sense of place and rural economy.

However it is the view of the Partnership that wind farm developments within the Biosphere could be acceptable in the transition zone, where substantial community engagement has demonstrated that the majority of communities are supportive of the proposed development and it can be shown that the environmental impact of the development is minimal and effective mitigation can be achieved.

The Galloway and Southern Ayrshire UNESCO Biosphere has been recognised internationally as a world class environment for people and nature and the designation is a key asset for the area.

In addition to the board, it has 350+ Biosphere Proud Supporters consisting of businesses, organisations and individuals who are all committed to the Biosphere ethos of "Benefiting people and nature".

The UNESCO Biosphere designation is international recognition of the fantastic array of landscapes, wildlife, cultural heritage and learning opportunities that SW Scotland offers for communities, businesses and visitors to experience and celebrate in a sustainable way.



Whilst UNESCO Biospheres are non-statutory designated areas they are nominated by national government and remain under their jurisdiction but are awarded the Biosphere Designation by UNESCO. Whilst they have no regulatory control they are governed by a form of "soft law" in that all member states of UNESCO have committed to applying and respecting the Statutory Framework for Biosphere Reserves.

The nomination process, for Galloway and Southern Ayrshire Biosphere included a signed commitment from Scottish Natural Heritage, Forest and Land Scotland (Formerly Forest Enterprise) and the three local authority partners (South Ayrshire Council, Dumfries and Galloway Council, East Ayrshire Council) to recognise and support the objectives of the UNESCO Biosphere designation.

That nomination was formally approved by Scottish Government and UK Government before being considered by the UNESCO MAB secretariat and the MAB International Cooperation Council who ultimately awarded the designation in July 2012.

The Statutory Framework for the World Network of Biosphere Reserves 1995 states that for an area to qualify for the UNESCO Biosphere designation;

It should encompass a mosaic of ecological systems representative of major biogeographic regions, including a **gradation of human interventions**.

It should be of **significance for biological diversity** conservation.

It should provide an opportunity to explore and demonstrate approaches to **sustainable development on a regional scale.**

It should have an appropriate size to serve the three functions of biosphere reserves, It should include these functions, through appropriate zonation, recognizing:

- (a) a legally constituted **core area** or areas devoted to long-term protection, according to the conservation objectives of the biosphere reserve, and of sufficient size to meet these objectives.
- (b) a **buffer zone** or zones clearly identified and surrounding or contiguous to the core area or areas, where **only activities compatible with the conservation objectives** can take place.
- (c) an outer **transition area** where sustainable resource management practices are promoted and developed.

Maintenance of the UNESCO Biosphere status is dependent on a 10 yearly Periodic Review demonstrating continued delivery and adherence to the Statutory Framework.

2. Galloway and Southern Ayrshire Biosphere Core, Buffer and Transition Zones

The Core area of the Galloway and Southern Ayrshire Biosphere is 106 sq. km and is based upon Merrick Kells (SSSI, SAC) Silver Flowe (RAMSAR) and Cairnsmore of Fleet (SSSI, NNR). These Core Areas are a largely 'natural' environment grazed by livestock, wild goats etc. The Core Area also contains designated Wild Land, Scheduled Ancient Monuments.



Management of the Core Areas is largely controlled by the limitations imposed by the SSSI, SAC and RAMSAR and SAM designations and the overseeing roles of Scottish Natural Heritage and Historic Environment Scotland on behalf of the Scottish Government.

The Galloway and Southern Ayrshire Biosphere (GSAB) Partnership Board does not support any form of development in the Core Area of the Biosphere that directly or indirectly negatively impacts in any way on the international and national designations awarded to the three core areas.

Further the GSAB Partnership Board recognise the intrinsic value of the Merrick Kells Core Area, having being identified by SNH as one of only two "Wild Land Areas" in Southern Scotland and the role that this designation brings in sustaining the "sense of place" that is integral to the remote upland areas that form the core of the GSAB.

The Buffer Zone of the Biosphere is 845 sq. km and largely comprises (86%) Galloway Forest Park (held in public ownership) with some smaller privately owned areas of forestry and agriculture. Within that area are nine SSSI's and three SAC's. The Buffer Zone is also recognised internationally as a Dark Sky Park and, as such, the impact of lighting both on the dark skies and on the surrounding ecology is a significant consideration.

The Buffer zone also contains national designations and regional designations (such as Archaeologically Sensitive Areas and Regional Scenic Areas), which have a mechanism for consideration and protection in policies set out in the Local Development Plan.

The GSAB Partnership Board recognise the economic value of commercial forestry in the Buffer Zone and believes that with sympathetic and considered management it can deliver both economic, ecological and social benefits which can be reconciled with the Biospheres other special qualities.

Within the Buffer Zone, The GSAB Partnership Board are supportive of low-key development that supports sustainable tourism and contributes towards ecological connectivity, peatland restoration and creation of open ground habitats.

The GSAB Partnership Board are not supportive of developments in the Buffer Zone that have a negative impact on the core of the Biosphere, the ecology of the buffer or its sense of place.

The Transition Area of the Biosphere covers 4314 sq. km and comprises a mix of settlements, agriculture, forestry and woodland. Within that area are 82 SSSI's, 11 SAC's, 2 SPA's and 1 RAMSAR.

The transition area is where most settlements occur, and communities recognise and value their Sense of Place. The Transition zone also contains national and regional designations safeguarded in UK/EU law and by policies in the Local Development Plan.

The GSAB Partnership Board supports sustainable development within the Transition Area that adheres to relevant local development plans, can demonstrate community support and applies appropriate habitat mitigation where relevant. The GSAB Partnership Board are not supportive of developments in the Transition Area that have a negative impact on the core or buffer of the Biosphere, or its Sense of Place.

3. Clauchrie Windfarm Proposal

Scottish Power Renewables has applied to Scottish Ministers for consent under Section 36 of the Electricity Act 1989 to construct and operate Clauchrie Windfarm. The proposed development which is within the UNESCO Biosphere buffer area, is subject to Environmental Impact Assessment and an EIA report has been produced. Scottish Power Renewables have also applied for a direction under



Section 57(2) of the Town & Country Planning Act 1997 that planning permission for the development be deemed to be granted.

The proposed development occupies an area of some 2971 hectares and is located 5.5km north east of the village of Barrhill and will be 3km south of the village of Barr, South Ayrshire. The site is predominately covered in sitka spruce, owned by Scottish Ministers and managed by Forestry and Land Scotland and is centred around national grid reference 229473,588551.

It is understood that Clauchrie Windfarm will comprise of 18 turbines up to 200 metres in height from ground to blade tip. Each turbine will have a generation capacity of 5.6 megawatts. The overall generating capacity would therefore be around 100MW with up to 25MW of energy storage. In addition, the proposal includes supporting infrastructure, which will include:

- Turbine foundations
- Crane hardstanding
- Access tracks (13.5km of new track, 12.4km of upgraded track)
- Watercourse crossings
- Underground cabling
- Control compound and substation
- A permanent anemometer mast
- Two power performance masts
- Signage and CCTV
- Communication mast
- Eight borrow pits (130,000m3 of aggregate would be required)
- Two temporary construction masts.

The provision of a recreational car park is also proposed as part of the development. This will be constructed in the area of the temporary construction compound near the entrance of the site.

Forest restructuring would be required to allow the development to be constructed. This would require the advance felling of almost 300 hectares. A compensatory planting plan is proposed (technical appendix 14.4) of EIA report.

4. Site Selection

The UNESCO Biosphere Partnership Board are disappointed that in the site selection process the applicant has taken no regard of the international significance of the UNESCO Biosphere designation or of the policies of the local development plan.

They are further concerned that the proposed development would set a precedent for further windfarm developments within the Buffer area of the UNESCO Biosphere.

In the recently completed revision of the South Ayrshire Landscape Wind Capacity Study preference for windfarms in this area, described as landscape character type, *plateau moorland with forestry and wind farms*, recognised only limited scope for large turbines and that the additional designation of the dark skies park presented a major constraint to the construction of any turbines over 150m. Specifically it recognised that:

"the setting of the high rugged Galloway Hills and the Rugged Hills Loch and Forest character type is a constraint to development. Very large turbines could have a more intrusive effect on these remote



landscapes with lighting of turbines >150m high additionally likely to adversely affect their character" $^{\,\,1}$

The landscape strategy embedded in the development plan and reflected in the revised guidance seeks to maintain the rugged scenery and sense of wildness associated with the Carrick Forest area by ensuring " that development sited in surrounding landscapes avoid significant impact on its setting and experiential qualities including its dark skies.

The proposal fails to protect the landmark hills and their setting. Landmark Hills are steep – sided and well-defined hills forming very visible backdrops to the Girvan and Stinchar valleys and the South Ayrshire Coast. They include Kirkland Hill, Auchensoul Hill, Craig of Dalwhine as well as the Carrick Forest Hills. This proposal will be a dominant visual feature from these locations.

5. Effects on Landscape Character

The proposed development is located largely within South Ayrshire Council area in an area identified as having a landscape character type, South Ayrshire Landscape Wind Capacity Study (2018), "Plateau Moorlands with Forestry and Windfarms",18c. This study concluded that given the adjoining sensitive landscape areas and the presence of the dark skies park, and the need for fixed lighting on turbines over 150m, the opportunities, given these key constraints, for further large scale windfarms was very limited, with larger turbines being more able to be accommodated by replacing existing rather than the construction of new areas.

The report undertaken by South Ayrshire specifically referenced the impacts on the Stinchar and Girvan Valleys (UNESCO Biosphere transition zone) and on the Carrick Forrest area (UNESCO Biosphere Buffer Zone) as presenting key landscape and visual constraints to development in this area. The recommended landscape strategy (refer section 3.5) within this document is clear and has the intent of directing wind farm development away from the Carrick Forest Area (part buffer area of the Biosphere) landscape whilst also ensuring that any development sited in surrounding landscapes avoid significant impact on its setting and experiential qualities including its dark skies.

Currently the "Rugged Uplands, Lochs and Forest "landscape character type has no operational or consented wind turbines within it. The very sparsely settled nature of this landscape and the difficulty of access, particularly to the higher and more rugged hills extending south toward the Merrick, can give a strong sense of seclusion. For these reasons this landscape is highly sensitive to the influence of large windfarms and merits strong protection from this form of development. The development as proposed would significantly diminish the strong sense of naturalness and remoteness which can be experienced in the upland core of this landscape. It is proposed that two of the turbines would be located within this landscape type which would set a precedent for future development.

6. Effects on designated landscapes and wild land

Designated Scenic Areas

The proposal(part) is within a scenic area. It is noted from the Environmental Assessment that the proposal will have significant effects on the scenic area, locally and to the north of the proposed development, to the east across the Rugged Uplands and Loch Forest LCT and from the northern



¹ South Ayrshire Landscape Wind Capacity Study (2018)

upper sides of the Stinchar Valley. The impacts would also be significant across west facing slopes of the Merrick foothills. These impacts are illustrated through visuals which show the designated landscapes of the area, Figure 6.6-Designations and Figure 6.18b ZTV with designations.

It is considered that these impacts would have significant and adverse effects (unacceptable) on the cultural landscape, strong sense of place and unspoilt character associated the criteria on which the designation is based. This is confirmed in the environmental assessment which acknowledges there would be detrimental effect on the characteristics which are reflected within the designations.

Wild Land

The Merrick WLA is located approximately 5.8km from the nearest turbine. TA: 6.3 Wild Land Assessment provides an assessment of the impact on wild land qualities. The significant effects of the development are noted as being to the western flank of the Merrick WLA, that form the range of Awful Hand, consisting Nenyellary, Merrick, Kirrieroech Hill, Tarfessock to Shalloch Ridgeline.

The indirect effects on the wildness qualities are assessed as significant in these areas, derived largely resulting from changes of views westward.

7. Visual Impact

The environment statement considers the visual impact of the proposal.

This demonstrates that there will be significant, long term and adverse impacts on viewpoints within the core area and buffer zone of the UNESCO Biosphere.

Viewpoint 8 from the top of the Merrick Hill, 843m, is a popular destination for hill walkers and lies within the centre of the Biosphere, it is a key focal point with well established walking routes. It lies within the Galloway Scenic Area and the Merrick WLA.

The effect of the development is illustrated by photomontage 6.34g. As the image demonstrates this proposal will have a significant effect on the view experienced by walkers, due largely to the increased scale and visual influence of the proposed turbines in comparison to those currently visible and more distant in the view.

Viewpoint 13 near the summit of Shalloch on Minnoch in the south Carrick Hills is representative of views experienced by hillwalkers on this hill and on the WLA. Illustrated by Figure 6.39g the proposed development will be visible to the west/north west approximately some 7.5km to nearest turbine.

Due to the elevated position from the hill, all the development will be seen, it is recognised in the Environment Statement that the visual impact will be significant, long term and adverse.

Viewpoint 17, Kirriereoch Picnic Site, is within Biosphere buffer area (and Galloway Forest Park) it is just off the Glentrool Forest Road, near the water of Minnoch. It is representative of views that visitors will have when visiting the picnic site or cyclists using National Cycle Route 7. The predicted view of the proposed development is illustrated by photomontage 6.43e. This is a highly sensitive location and the impacts would be significant, long term and adverse.

Viewpoint 20 is located on the new Barr Trail, near Whiteknowes. Whilst out with the buffer zone its proximity to the development demonstrates the adverse visual impacts that would be experienced by walkers in the area. This is illustrated through Figure 6.46f-g. It is clear from this image that the



proposal will result in a high magnitude of change which will be significant on recreational users and residents in this area. The turbines, given their scale, will be particularly prominent.

Viewpoint 21 is on the Barr to Loch Doon cycle route, which is a link to the National Cycle Route 7. The proposed development will be to the south with up to 11 turbines visible. As demonstrated by Figure 6.47g-h there will be a significant change to the current view which when experienced by cyclists and walkers will be adverse and long term.

It is the view of the Galloway and Southern Ayrshire Biosphere Board that this proposal will introduce unacceptable visual impacts on the buffer and core area of the Biosphere.

Cumulative Impact

With increasing levels of consented and operational windfarms within south west Scotland (illustrated by Figure 6.24) the cumulative impact of proposals will increasingly be relevant in the acceptability of new developments. Turbines of 200m in height will dominate this landscape and diminish the sense of place and perceptual quality currently enjoyed by residents and visitors. The blade tip ZTV (figure 6.17b) demonstrates that extensive areas of the designated Biosphere area will have visibility of the scheme, in many locations all 18 turbines will be seen.

This proposal would change the experience visitors and residents would have of the area and significantly increase the influence of windfarms in the landscape.

The landscape and visual impact assessment within the environmental statement concludes significant cumulative impacts would occur within the buffer area landscapes. This is summarised in Table 6.12.1. Within the designated scenic areas in South Ayrshire and Dumfries and Galloway the localised impacts would also be significant. The cumulative effect of the proposed development results in an easterly extension of the spread of windfarms in the landscape.

It is the view of the Galloway and Southern Ayrshire Biosphere Board that the cumulative impact of the proposal in combination with other existing and approved applications is unacceptable and will have adverse impacts on the core and buffer areas of the Biosphere. Maintaining a "gap" between major windfarms groupings and a buffer zone free of operational windfarms will be essential to the acceptability of future schemes in South West Scotland.

8. Tourism Considerations

The tourism sector is important to the economy of south west Scotland and has the potential for significant expansion. This is recognised by the respective development plans of Dumfries and Galloway and South Ayrshire. At the heart of this growth is the enhancement of the qualities of the environment whilst also ensuring the assets on which this sector is based are protected from the impacts of inappropriate development.

A range of the assets in the area are particularly sensitive to development. In addition to the Galloway and Southern Ayrshire UNESCO Biosphere, the area is designated as a Forest Park and has additional internationally recognised attributes through the Dark Skies Park designation. There are, in addition, several significant monuments, gardens and nationally recognised castles which define the character of the area. There are also several driving/recreational routes and a network of walking and cycling routes popular with visitors and tourists to the area. These include the Carrick



Forest Drive and National Cycle Route 7, a long- distance route which forms part of the Ayrshire Alps Cycle park.

A key reason for the designation of the UNESCO Biosphere in south west Scotland was to use the areas internationally recognised landscapes and wildlife value to stimulate and promote new tourism opportunities in the region.

Over the last three years the Biosphere Partnership have been involved in three significant projects both within and adjoining the proposed development area. All are focused on supporting new sustainable tourism opportunities involving local communities.

SHAPE is a €1.5 million three-year project (2017-2020) funded by the European Commission's Northern Periphery and Arctic Programme. SHAPE has enabled authorities, businesses and communities to develop innovative ecotourism initiatives which preserve local natural and cultural assets and generate economic value. The focus of SHAPE has been Glentrool Community, the Cree Valley and surrounding areas.

People, Land, Art, Culture and Environment in the Biosphere is a partnership project funded jointly by Heritage Lottery, D&G Council, South Ayrshire Council, the Biosphere and Southern Uplands Partnership that runs from May 2018 to March 2021. Through working with artists, writers, geologist, historian, wildlife guides etc. the Biosphere team hope the project will uncover some of the hidden gems of the Biosphere and their intrinsic links with the landscape that make the region so special. The communities of the Stinchar Valley are a key focus for the project who amongst other aspects are exploring how to promote the tourism opportunities of the valley.

The Scottish UNESCO Trail was identified in The Government's Programme for Scotland 2019-20 as a priority. The Digital Trail links thirteen designated UNESCO sites in Scotland including Galloway and Southern Ayrshire Biosphere.

- To increase the value of visitors to the sites.
- To encourage geographical spread of visitors to the different regions.
- To engage with and involve local communities.
- To promote the UNESCO values.
- To apply sustainable tourism policies to contribute towards the Sustainable Development Goals.

This work could be compromised by such a significant development within the Buffer of the UNESCO Biosphere.

9. Dark Sky Park

Astro- tourism recognised by visit Scotland as" the interests of tourism in space related activities such as dark skies observations, astronomy and astro-photography" is increasingly important. The Biosphere is fortunate in having an expanse of dark skies, areas unpolluted by artificial light. This is a product only a very few areas in the world can offer. The area also benefits from the presence of the Scottish Dark Sky Observatory, at Craigengillan near Dalmellington. Since the designation of the park in 2009 tourism business have seen an increase in off season visitors. It is increasingly seen as an important product in sustainable tourism and was last year promoted in Lonely Planet as one of the future travel trends. It is therefore disappointing that through the requirement of the Civil Aviation Authority guidance that 'en-route obstacles' at or over 150m above ground level are lit with visible lighting to assist their detection by aircraft. (Refer EIA, Volume 4 Appendix 14.2 (part 1 & 2) Aviation



Assessment). This requirement would have the effect of the development at night showing visible medium intensity lights (2000 candela) and red coloured light fittings on the nacelle and on turbine towers. Mandatory lighting of the turbines will be a significant, with long term and adverse impact of the night sky characteristics within the Biosphere core and buffer zones.

This is demonstrated by viewpoint 24, Benyellary which is within the core of the dark sky park and illustrated by Figure 6.50i. and 6.34j. These figures demonstrate that the development will be seen as an array of red lights on each of the 18 turbines within the dark forested plateau backdrop.

Whilst it is noted that mitigation measures currently being investigated include technical innovations to limit the extent of the time when lighting is on. These solutions would still create short intermittent periods of lighting which would still incur landscape and visual effects which would be adverse.

It is the view of the Galloway and Southern Ayrshire Biosphere Board that the dark skies within the Galloway and Southern Ayrshire Biosphere are a unique asset to the area which merit protection from the adverse effects associated with turbine lighting.

10. Habitat Improvements

Notwithstanding the comments above and the objection made by the board it is disappointing that as part of the mitigation proposed for the scheme that the habitat management plan is limited to 45ha. Whilst welcoming the proposals for peat restoration outlined in the management plan the phase 1 habitat covering the site recognised that there were further opportunities for habitat management which would include the strengthening of local corridors and networks

The Board therefore support the comments of RSPB that the scale of the Habitat Management Area does not adequately compensate for the impacts and further steps could be taken to improve the local habitat and biodiversity of the area. The Biosphere Partnership Board would encourage further proposals on and off site which delivered habitat and species diversity consistent with the high focus habits and species already identified by the Biosphere Partnership Board. (Refer: Biosphere High Focus Habitats and Species²)

11. Scottish Planning Policy

It is acknowledged that Scottish Planning Policy gives encouragement to the planning system to support renewable energy developments which will help mitigate climate change or facilitate the change toward a low carbon economy, this is particularly relevant in the context of a climate change emergency. However, this policy is balanced by the significant protection it affords to several national interests, such as areas of wild land and deep peat. Scottish Planning Policy is also clear that the siting and design of development should take account of local landscape character and that decisions should take account of potential effects on landscapes including cumulative effects. Where these impacts are judged unacceptable to the natural environment, as outlined above, the development should be refused.

GALLOWAY AND SOUTHERN ARESHIES BIOSPHERE

² High Focus Habitats and Species

12. Conclusion

As illustrated above the content of the Environmental Statement and supporting documentation confirms the view of the members of the Galloway and Southern Ayrshire UNESCO Biosphere Partnership Board that this application does not accord with the policies of Dumfries and Galloway & South Ayrshire Local Development Plans or the content and guidance set out in the recently revised South Ayrshire Supplementary Landscape Guidance on wind farm development.

It is the view of the UNESCO Biosphere Partnership Board that due to its scale, sensitive position and impact on the core and buffer areas of the Biosphere, the development as proposed:

- cannot be accommodated in a manner that respects the main features and character of the landscape.
- will have significant detrimental visual impact, considering the views experienced from surrounding residential properties and villages, public roads and paths, significant public viewpoints and important recreational assets and tourist attractions.
- will have unacceptable cumulative and visual impact when considered in combination with other wind energy developments existing or approved on designated scenic landscapes.
- will have an adverse impact on skylines and hill features, including prominent features.
- does not support the aims of the UNESCO Biosphere.
- will set an unacceptable precedent of wind energy development in the Buffer Zone of the UNESCO Biosphere
- will produce levels of lighting which would adversely affect the Galloway Forest Dark Skies status.
- will have a significant (adverse) effect on the Merrick wild land area.

It is the view of the Galloway and Southern Ayrshire Biosphere Board that these effects are contrary to the respective local development plan policies of South Ayrshire and Dumfries and Galloway Council and accordingly the development should be refused for the reasons noted above. There are no other over-riding reasons for the decision to depart from local development plan policy.

