



View from Shalloch on Minnoch

Carrick Wind Farm Application

(Ref: ECU00003392)

Submission by Save Straiton for Scotland -  
Objection

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# 1 Introduction

The proposed Carrick Wind Farm is on an 827.28 ha site and comprises 13 turbines (6.6 MW or 9,000 horsepower each) up to 200 metres high plus battery storage. It is situated in the South Ayrshire Council area, 6 km south of Straiton, in Carrick Forest and within the boundary of Galloway Forest Park. The land, which is currently being used for commercial forestry and rough grazing, is part of the National Forest Estate, owned by the Scottish Ministers and operated by Forestry and Land Scotland (FLS).

The developers are [Scottish Power Renewables \(SPR\)](#), a subsidiary of the [Iberdrola Group](#), a Spanish multinational energy company. SPR have several operational wind farms in the surrounding area including Kilgallioch, Arecleoch, Mark Hill, Glen App, Dersalloch, Hare Hill and Hare Hill Extension. Recently consented large-scale wind farms (over 200 m high turbines) include Arecleoch Extension and Kilgallioch Extension.

Save Straiton for Scotland (SSfS) is a campaigning organisation constituted with an overwhelming mandate from the community of Straiton in order to protect and defend the Parish of Straiton, neighbouring communities and surrounding countryside SSfS against any and all inappropriate development that would seek to undermine the uniquely special landscape, environment, heritage and ecosystem which define Straiton and its environs.

For this Submission SSfS and our supporters have carefully reviewed the planning application for Carrick wind farm submitted by Scottish Power Renewables and have noted numerous and significant concerns. Our concerns are as follows and refer to the relevant chapter of the Environmental Assessment.

## 2 LVIA Chapter 5

We are particularly concerned that the proposal for 200m high turbines goes against the recommendations in the 2018 South Ayrshire Landscape Wind Capacity Study for landscape type; • 17c Foothills with Forest and Wind farm which encompasses the majority of the proposed development area, and states “There is no scope for very large turbines (>130m high) to be accommodated in this landscape.” We support this statement and have concerns that the scale of the proposed turbines will dominate both the existing forestry and wider hills.

Also of particular concern is that the proposed development would have a significant and irreversible effect on the two Pastoral Valleys: the **Stinchar Valley** and the **Water of Girvan Valley**. The importance of the character of these valleys is defined by NatureScot as:

***SNH National Landscape Character Assessment Landscape Character Type 72 PASTORAL VALLEYS – AYRSHIRE***

*The Pastoral Valleys - Ayrshire Landscape Character Type occurs in three places in Ayrshire, focused in the north and south. To the north Brisbane Glen is located to the north of Largs. To the south the Stinchar Valley and its tributary the Duisk Water Valley north-east of Ballantrae, and the upper reaches of the Water of Girvan Valley can be found south of Straiton.*

***Perception***

*These are well settled, intricately patterned landscapes which have a rural, picturesque quality, a rich heritage and a strong sense of timelessness. The surrounding upland landscapes form the defining ridges at their edges and can create dramatic horizons in certain views. Views tend to be short to medium distance, focused up and down the valley in the direction of travel. Knockdolian Hill also forms a prominent landscape feature in views along the western reaches of the Stinchar Valley.*

***Location and Context Key Characteristics***

- *Narrow, intimate medium to small scale valleys with steep slopes and relatively flat bottoms cut into the foothills and moorlands of the Ayrshire uplands.*
- *Strongly contained by adjacent uplands with occasional higher and more pronounced summits.*
- *Diverse land cover dominated by broadleaf woodland including shelterbelts, riparian woodland and policy woodlands separating the valley into small parcels of pasture.*
- *Network of tree-lined winding roads.*
- *Number of hill forts, hilltop cairns, castles and strongholds, and mansion houses, resulting in a rich heritage and a strong sense of timelessness.*
- *Settlement comprises a dispersed scatter of houses and farms.*

- Well settled, intricately patterned landscape which has a rural, picturesque quality.
- Views tend to be short to medium distance, focused along the valley in the direction of travel with the surrounding upland landscape forming the enclosing, often dramatic, ridgeline in views. More pronounced 'landmark' hills form key foci. Open views are available from elevated roads and where floodplain is more open.

- Popular walks and hill views provide elevated views over this landscape.

### ***Landscape Character Description Landform***

*The valleys of the Pastoral Valleys – Ayrshire Landscape Character Type are narrow, cut into the foothills and moorlands of the Ayrshire uplands. For the most part these are medium to small scale valleys with steep slopes but relatively flat valley bottoms. The solid geology of these valleys is varied. Brisbane Glen is carved along the boundary between Millstone Grits and Basalts, while the Stinchar Valley and upper part of the Water of Girvan Valley lie in the complex area along the Southern Uplands Fault zone. The Stinchar Valley includes a dramatic volcanic plug, Knockdolian Hill. Land cover is dominated by the structure of broadleaf woodland which includes shelterbelts, riparian woodland and policy woodlands and which separates the valley pastures into small parcels of fields. Other field boundaries tend to comprise drystone dykes and some hedges. The edges of more extensive coniferous forests are visible along the upper slopes of the valleys.*

### ***Settlement***

*Although the valleys contain few designed landscapes, there are a number of hill forts, hilltop cairns, castles and strongholds. Settlement comprises a dispersed scatter of houses and farms, with a small number of settlements, generally on a small scale and often located at key bridging points. Many buildings comprise whitewashed harl with slate roofs.*

With the sense of history, heritage and timelessness these valleys should not be compromised in any way. Once these qualities are lost, they are lost for all generations to come. For those living in the valleys and for those visiting the valleys it is these qualities which are important for the quality of life.

### 3 Wild Land Assessment Appendix 5.5

Wild Land is described by Nature Scot as “perceived naturalness of land cover; ruggedness of terrain; remoteness from public roads, ferries or railway stations; visible lack of buildings, roads, pylons and other modern artefacts.”

The Merrick is in one of only two WLAs in the Southern Uplands. This WLA is a particularly precious resource and lies at the core and is a key part of the UNESCO Biosphere.

The Proposed Development would have significant effects on the naturalness and remoteness attributes within 3 km of the northern boundary. While the developer maintains that the Proposed Development would have *no* effects on the secluded and remote interior areas of the WLA there is no way of reaching the interior without the effects of the proposed development as well as the cumulative effect of other built and proposed developments. The assessment also found there would be no significant effects on the qualities and attributes of the WLA overall but it is apparent from the photomontages and wireframes that this is not the case.

Some or all of these very tall turbines are visible from Shalloch on Minnoch (VP5), Merrick (VP15), Benyellary (Fig 5.5.2), Mullwharchar (Fig 5.5.3), Craignaw (Fig 5.5.4), Loch Girvan Eye (Fig 5.5.5), western slopes of Craigmashenie (Fig 5.5.6) and the summit of Craigmashenie (Fig 5.5.7a ). The number of visible wind turbines reduces to the south of Shalloch of Minnoch, where between five and eight wind turbines would be visible, except for the highest points around Mullwharchar in the east where up to 13 wind turbines would be visible. Because of this, the Study Area focused on the northern end of the WLA rather than the rest of the WLA. A disappointing assessment considering how striking these turbines appear in the images, including to the south.

It is not purely what can be seen from within the Wild Land Area but also what can be seen on the approaches. This is what makes up the whole lived experience for walkers, including some who may not be able to even reach the interior areas of the WLA where they would be able to experience the true remoteness of the area. Those going to and returning from the WLA would have their whole experience coloured by driving past the proposed windfarm an industrial area not at all in keeping with the wildness of the approaches as they now are.

SNH states in guidance (October 2014) the importance of protecting not only the edges of wild land but also understanding that developments out with the wild land area can adversely impact the perceptual responses. In the light of the scarcity of the wild land resource in Southern Scotland we are of the view that the proposal has an unacceptable degree of impact upon the wild land resource. We also have concern that the developer draws distinction between different parts of the WLA - some are more sensitive than others when clearly the value of the designation lies in its whole and not its parts. To say that some parts are not so sensitive gives an excuse to go ahead with inappropriate development. Wild Land should be treated in the same way as National Parks where the effect on the whole is taken into account. If this were not the case, then it would be possible to nibble and nibble away to the point of no recovery.

## 4 Socio Economic, Tourism & Economy Chapter 12

UNESCO Biospheres are areas recognised as being of international significance and value for their biodiversity interest. They are nominated by national governments (in Scotland by the Scottish and UK Governments working together) and once approved by UNESCO form part of a worldwide network of protected areas. All member states of UNESCO have committed to applying and respecting the Statutory Framework for the World Network of Biosphere Reserves 1995.

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. The designation is highlighted in the SAC Local Development Plan, and in both the 2017/18 and the 2019/20 Programs for Government highlighted opportunities related to the UNESCO Biosphere as a visitor destination. The most recent and significant of these was the launch in October 2021 of Scotland's UNESCO trail linking together all of Scotland's UNESCO designated sites and promoting them as destinations for sustainable tourism. This was a world first for Scotland, supported by Scottish Government, Visit Scotland and others. 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.



Referring to visitors to the Galloway Forest Park the developer is dismissive of the effect on them *“as they are occupied in their particular recreational pursuit”*. The approach to the park is part of their whole day experience. What is inside the park cannot be separated from what is outside. Many would approach from the Kirkmichael through Straiton and would therefore have sight of the proposed development from the B7045 entering Kirkmichael with other points along the C46W from Straiton right through to the Stinchar Bridge – a distance of some 10 miles approximately.

The developer is also dismissive of the effect on those who use the core paths, SA47, SA49 and SA56 stating that, because these are within a forest area or cleared forest area that the *“surroundings are not a significant factor to the enjoyment of the walk”*. This is a sweeping statement to make and does not take account of the different ways in which people enjoy their surroundings.

View point 8 shows the scene from the Hunter Blair Monument on Craigenower Hill. From this point the whole windfarm becomes part of the “view”. Those who make it to the top of Craigenower have had a strenuous walk and look forward to views of the rolling countryside not to look down on an industrial estate.

View point 6 taken from the Newton Stewart Road south of Straiton was taken before the forest on Bennan Hill was felled. This highlights again the folly of using trees and woodland as so-called screening. By their very nature they are not permanent features and the trees which have now been planted will be many years before they could be said to screen anything.

Between Craigfad and Linfairn and south of Tairlaw the character of the Water of Girvan would change to one where turbines would be a prominent feature in the backdrop to the valley. They would be dominating and have a significant impact on the intimate pastoral valley.

This proposed development sits within the buffer area of the Biosphere where large scale development is not considered appropriate and therefore should not be allowed.

Scottish Government guidelines state that developments should not be allowed in inappropriate places – this is a totally inappropriate place.

VisitScotland has said that tourism is crucial to Scotland’s economic and cultural well-being. It sustains a great diversity of businesses throughout the country. According to a recent independent report by Deloitte, tourism generates £11 billion for the economy and employs over 200,000 - 9% of the Scottish workforce. Tourism provides jobs in the private sector and stimulates the regeneration of urban and rural areas. One of the Scottish Government and VisitScotland’s key ambitions is to grow tourism revenues and make Scotland one of the world’s foremost tourist destinations.



Scenery and the natural environment are recognised as the two most important factors for visitors in recent years when choosing a holiday location and the importance of this element to tourism in Scotland cannot be underestimated. The character and visual amenity value of Scotland's landscapes is a key driver of our tourism product: a large majority of visitors to Scotland come because of the landscape, scenery and the wider environment, which supports important visitor activities such as walking, cycling, wildlife watching and visiting historic sites.

We note in Appendix 12.1 that the developer has used data from the VisitScotland website to produce tourist accommodation in the area and would point out that this is a vast underestimate of what is available.

This proposed development is the wrong one in the wrong place.

## 5 Hydrology, Hydrogeology, Geology & Soil

### Chapter 6

The proposed development lies within a Drinking Water Protected Area and, although that would be a concern, we leave that to the expertise of SEPA.

Various water features have the potential to be affected by this proposed development. These are Linfairn Loch located just outside the site could be affected by run-off. This loch is a unique feature in the Carrick Forest and has its own very special habitat and environment. In recent years ospreys have bred near the loch and it is not uncommon to see pink footed and greylag geese as well as mallard ducks on and about the loch.

The rivers Stinchar and Girvan are both excellent salmon and trout rivers. The catchment areas for both rivers are within the proposed development site and there is the potential for contamination of these watercourses too. The Ballantrae gravel banks at the mouth of the River Stinchar are SSSI for the nesting birds' population and for its coastal features. Salmon and trout fishing is a popular pastime and Straiton has an active angling club which depends on not only local membership but day visitors too. Both of these rivers should be regarded as highly sensitive to changes in catchment hydrology. Any harmful effects would be detrimental to the aquatic ecology and would therefore also impact on the local economy.

## 6 Ecology and Biodiversity Chapter 7

This chapter reports the likely effects on ecology and biodiversity. The assessment found all residual effects to Important Ecological Features (IEFs) from construction and operational activities, for the proposed Development and in combination with other developments in the wider area, to be no greater than adverse at a low magnitude, short term and reversible.

The Site is in Carrick Forest and within the boundary of Galloway Forest Park (Dark Skies Park) and the Buffer Zone of UNESCO's Galloway and Southern Ayrshire Biosphere Reserve. Galloway and Southern Ayrshire UNESCO Biosphere Partnership said at Scoping that any large-scale 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.

One statutory designated site, Merrick Kells SAC/SSSI, was recorded within the search area but scoped out. Five non-statutory designated sites were recorded within the search area. They are: Galloway Red Squirrel Priority Woodland (RSPW); Galloway and South Ayrshire Biosphere Reserve; River Stinchar Potential Local Wildlife Site (PLWS) which includes Linfern Loch and its immediate margins which support scarce plant species and breeding birds; Straiton Hills PLWS, an area of botanical and ornithological interest; Tairlaw Glen and Whiterow Burn which between them have 16 hectares of ancient woodland; Craigenreoch and Eldrick Hill PLWS which has areas of blanket bog and is important for breeding birds and a large range of upland species.

No evidence of badger activity or setts were recorded within the Proposed Development Area or Protected Species Survey Area. The closest historical record was noted over 3 km away and the conclusion being that it is unlikely that badgers regularly use the Site. No mention of the adjacent Linfairn and Knockcronal Wind Farm surveys which showed badger activity. During 2020 field surveys for Knockcronal Wind Farm, evidence of badgers included latrines, signs of foraging and evidence considered sensitive, presumably setts. The two badger latrines are less than 1 km from the proposed Carrick Wind Farm Site boundary.

With regard to bats, the conclusion is that with the application of additional mitigation and ongoing monitoring, it is predicted that bat fatalities would be less than two bats per wind turbine per year. If more are slaughtered, the curtailment parameters would be amended. No mention of the recent 2020/2021 bat surveys carried out for Knockcronal Wind Farm, immediately adjacent to the proposed Development. Knockcronal turbines T3, T4, T5 and T6 are around 1 km away from the boundary of Carrick Wind Farm Site and around 2 km from Carrick turbines T4, T7, T10 and T12 respectively. Common pipistrelle, Soprano pipistrelle, Myotis spp. and Noctule were recorded at these Knockcronal turbine sites during surveys.

With regards birds, there is a large number of species in and around this Site including osprey, goshawk, merlin, peregrine, marsh harrier, hen harrier, kestrel, sparrow hawk, snipe, woodcock, curlew, pink-footed goose, greylag goose, black grouse, crossbill and skylark plus a long list of common species. However, it is difficult to understand how the surveyors, using such large view sheds, and with so much intervening forestry, could properly assess the species on site. In addition, the Flight Activity Surveys carried out from Sept 2018 to Aug 2019 comprised several hours a month. Hardly enough time to see anything.

It is worth noting that the site boundary for these bird surveys was twice as large as the final site boundary. Although this was claimed to be a positive thing, it is possible that less emphasis was placed on surveying the final turbine positions, many of which were at the far arc of the view sheds and in amongst forestry.

Of the total 34 species recorded in the Bird Breeding Survey, 24 were of conservation concern, including 22 species assessed as breeding. These include three Schedule 1 raptor species. The majority of other common species recorded were confirmed or likely to have bred within the Survey Area. Other notable breeding species included crossbill (Schedule 1) but the Breeding Bird Surveys were not designed to record woodland species such as crossbill and numbers of breeding territories are likely to be underestimates.

SPR detect and record dead or injured animals found weekly under turbines across all their wind farms. This includes a visual check of the hardstanding and adjacent access track but doesn't cover the entire area where carcasses could fall. They say the sample provided can be used to generate estimates of collisions and will be employed for the duration of the operational period. Many of the bodies would not be found because they would have been taken by scavengers.

Water voles are a protected species yet, *“Loss of burrows and suitable riparian habitat to accommodate the Proposed Development could result in fragmentation and displacement through permanent and/or temporary loss or degradation of supporting habitat.”* It is also likely that voles would be killed or injured because of the work being done. This is unacceptable.

## 7 Noise Chapter 9

It is proposed that noise level limits be apportioned between Carrick, Craiginmoddie and Knockcronal wind farms as part of consent conditions so cumulative noise effect would not arise. In other words, the cumulative noise levels are too high.

The assessment identified that, should Craiginmoddie Wind Farm be consented, that development would require a limited degree of turbine noise management to reduce noise levels to below the daytime limits at the receptor of Doughty Farm.

This chapter mentions very dated reports with regard infrasound claiming *no* evidence of health effects arising from infrasound or low frequency noise from wind turbines.

There is no mention at all of the important World Health Organisation report '[Environmental Noise Guidelines for the European Region](#)' (WHO, 2018) which specifically mentions wind farm noise. It states: "*Further research into the health impacts from wind turbine noise is needed so that better-quality evidence can inform any future public health recommendations properly. For the assessment of health effects from wind turbines, the evidence was either unavailable or rated low/very low quality.*" Specifically, the WHO are NOT stating that wind farm noise is safe.

## 8 Shadow Flicker Chapter 13

Seven properties were identified within 2.5 km of the Proposed Development that may be affected by shadow flicker. Of these seven properties, the assessment found that five properties may experience theoretical shadow flicker with only one property of the five potentially affected in excess of an acceptable level in a theoretical worst-case scenario. Once operational, and residents have a problem with shadow flicker, they have to make a complaint to the local planning authority. An investigation by an appropriate expert will take place and if shadow flicker is found to be occurring, action will be taken to mitigate the flicker to acceptable levels.

## 9 Aviation Lighting Appendix 13.4

1. The Civil Aviation Authority (CAA) require the turbine hub to be lit by 2000 candela (cd) steady red lights, reduced to 200 cd where visibility permits, and with a single set of intermediate steady red lights halfway down the tower at a reduced intensity of 32 candela. This may reduce the magnitude of landscape and visual effects for distant receptors but would not remove visibility of aviation lighting completely for nearby receptors. The Applicant wants an en-route aviation detection system installed which means lights go on for a short period when an aircraft is in the vicinity of a turbine. CAA are still finalising their draft consultation on this and their approval is required for implementation. There is clearly a lot of uncertainty around turbine lighting.
2. It is SNH's experience that 200cd lighting can be clearly visible and draw the eye within an unlit context at a distance of 20 km. The proposal could introduce eye-catching and prominent lights into an area important for its dark skies.
3. Currently, the perception of this area is that it is undeveloped by very large industrial structures and unlit at night. Turbines at 200 m (to blade tip) are likely to be highly visible, more especially with aviation obstruction lighting, whether these lights are on for a short length of time or not. The protection of dark skies is of paramount importance. Any lights on tall structures in this intrinsically dark landscape would be conspicuously out of keeping. It is imperative that lighting of this type is excluded.
4. In 2009, Galloway Forest Park was designated the fourth Dark Sky Park (Gold Tier) in the world and is a key tourist draw to the area. The night skies here are so dark that it is possible to see over 7000 stars and planets with the naked eye. Turbines and lighting should never be used here, or in the vicinity of places like this, however infrequently turbine lights are purported to be on.

## 10 Residential Visual Amenity Assessment

Five residential properties underwent a Residential Visual Amenity Assessment due to their close proximity to the turbines. While the RVAA alleges *no* significant effects from the proposed Development on residents at Doughty Farm, significant effects were assessed at Glenalla, Tairlaw Toll Cottage, Tairlaw Toll House and Tallaminnoch where the turbines would be close and prominent viewed from the property or curtilage. Even then these properties failed to reach the Residential Amenity threshold, the excuse being they were screened by landform, forestry and vegetation. Taking into account the cumulative effects of Craiginmoddie and Knockcronal wind farms, the properties *still* failed to reach the Residential Amenity threshold! It is quite clear that the turbines will be overbearing and distracting for all residential properties. Trees and vegetation will never provide a suitable long-term solution for screening and should not be regarded as such.

## 11 Planning & Energy Policies

### **South Ayrshire Local Development Plan**

The proposed Development is against the South Ayrshire Local Development Plan (2014), and the new development plan which is in the process of being passed. SALDP (2014) says support for renewable energy development should not cause damage to the landscape and natural heritage, should not cause detrimental visual impacts, should not cause the loss of residential amenity (noise and shadow flicker) and should not cause adverse effects due to the cumulative impact with other developments in the area. Legislation (Section 25 of the Town & Country Planning (Scotland) Act 1997 (as amended) requires that decisions on proposals for development are made in accordance with the above plan.

### **Scottish Planning policy**

The proposed Development is against Scottish Planning Policy (2014) which states that the cumulative impact of existing and consented energy development limits the capacity for further development. Planning should direct the right development to the right place. The planning system should, in all rural and island areas, promote a pattern of development that is appropriate to the character of the particular rural area and the challenges it faces; and encourage rural development that supports prosperous and sustainable communities and businesses whilst protecting and enhancing environmental quality.

### **Fourth National Planning Framework**

The proposed Development is against the draft 'Scotland 2045 - Fourth National Planning Framework' (NPF4) which states that wind farm development will be supported out with the National Parks and National Scenic Areas, unless the impacts identified are unacceptable. It also states that change of use of an area should only be permitted where the existing use is no longer viable.

### **Scottish Onshore Wind Policy**

The proposed Development is against Scottish Government Onshore Wind Policy (2017) in that development should be compatible with the interests and protection of Scotland's environment and residents. Developments must strike the right balance between utilising Scotland's renewable energy resources whilst protecting Scotland's scenic landscapes and natural heritage.

It is also worth mentioning that developers have recently started suggesting that the [Onshore Wind Policy Statement Refresh 2021](#) which was issued during 2021 indicates that further wind farm development should now be approved even if damage which would previously have been unacceptable is caused. That is not, in fact what the document says BUT successive inquiries have ruled that, being a draft document, not yet considered by the Scottish Parliament, it is of no relevance.

## 12 Forestry Appendix 13.1

To comply with the Scottish Government's Control of Woodland Removal Policy, the woodland loss must be compensated for by planting an equivalent area of woodland elsewhere. The developer has agreed that this is required in the report and that they have also recognised the need to consult with SF over those proposals. At present the location for the compensatory planting has not been identified by the developer.



We note that the felling of 100m radius was based on keyholing turbines of 115m in height and with a rotor diameter of 170m. Since the proposed height of turbine is 200m we question whether the felling figures are accurate.

## 13 Archaeology & Cultural Heritage

We note that Historic Environment Scotland do not wish to object to the proposals and welcome where mitigation has been embedded into the design of the proposals to reduce and avoid impacts on heritage assets and their settings. But they go on to say *“We note that a significant impact will remain on the setting of the Knockinculloch, enclosures on E slope of, 600m NW of Glenalla (Scheduled Monument, Index no. 3357) however are unable to support the compensatory mitigation proposed. This is because the proposal to enhance the archaeological record through the implementation and recovery of a peat core from this scheduled monument is likely to have a negative and irreversible impact on its cultural significance. It is unlikely that Scheduled Monument Consent (SMC) would be granted for these works.”*

## 14 Audit of EIAR Traffic & Transport Chapter 11

1. This section presents an audit of Chapter 11 of the Environment Impact Assessment Report (EIAR), Traffic and Transport, prepared for Scottish Power Renewables in December 2021 and submitted in support of the proposed windfarm development at Carrick.
2. Para 11.2.1 of the EIAR chapter sets out the planning policy against which the assessment is to be assessed. It is noted that since the report was prepared additional relevant policy has been published, some in draft form, but which is considered of material importance to the proposal. This includes the 2020 Westminster government white paper entitled Powering Our Net Zero Future issued 14 December 2020, the Scottish Government’s Onshore Wind Policy Statement Refresh 2021, National Planning Framework 4 and the UK Government’s Energy Security Strategy of 6<sup>th</sup> April 2022.

3. Table 11.1 of the EIAR chapter includes the consultation response from Transport Scotland, which states that;

*Transport for Scotland will require to be satisfied that the size of wind turbines proposed can negotiate the selected route and the transportation will not have any detrimental effect on structures within the trunk road path.*

*A full Abnormal Loads Assessment report should, therefore, be provided with the EIAR that identifies key pinch points on the trunk road network. Swept path analysis should be undertaken and details provided with regard to any required changes to street furniture of structures along the route.*

4. The applicant's response states that a route survey has been undertaken which could be updated as and when required following the granting on consent.
5. Given the massive impact the proposal will have, as discussed below, a full Construction Traffic Management Plan should have been submitted at the application stage, such that this impact could be fully assessed. It is not acceptable to defer such a critical assessment to the post consent phase.
6. One of the proposed access routes to the site from Glasgow will pass through Straiton and along the Newton Stewart Road, south of the village, through the Water of Girvan Valley. This issue was highlighted by the Crosshill, Straiton and Kirkmichael Community Council in their consultation response. The Applicant states that Section 11.2 of the EIAR Chapter addresses the concern with regards the B7045 between Straiton and the development site. However, Section 11.2 of the EIAR relates to Legislation, Policy & Guidance and makes no mention of the issues raised.
7. The Abnormal Load Access Review section of the EIAR sets out the abnormal load route would follow the M8, M74/M6, A75, U52W, A714 and C46W. The assessment fails to note that there is no direct link from the A74(M) southbound to A75 westbound at Junction 22 of the A74(M). This is a key failing and illustrates the lack of detail / understanding of the road network in that area. To overcome this failing, abnormal loads would need to leave the A74(M) at the Gretna Green, travel along minor roads, through Gretna Green village, negotiating tight turns and then join the A75. No assessment of this routing has been provided.
8. Further along the proposed abnormal load route, vehicles would head north on the C46W running from Glentroll Village to the site. The section of this route from the Bell's Memorial to the sire is single track road in a poor state of repair with passing places. No assessment of the impact of abnormal loads has been set out for this link and the impact it would have on current traffic using this route.
9. Again, it is unacceptable to defer such a critical assessment to the post consent phase.

10. Within the Baseline Conditions section of the EIAR chapter, results of traffic count surveys are presented which suggest that the C46W carries only 8 HGV movements per day. The count site was located south of the site but it is still considered that this data is inaccurate as the route is used by forestry lorries and HGVs accessing the water treatment plant at Loch Braden. The count point should have been north of Tairlaw Bridge to pick up these vehicles.
11. The state of repair of the C46W between Straiton and the site is very poor with significant damage / signs of subsidence caused by the current high level of HGV traffic that uses this route on a daily basis.
12. Turning to proposed construction traffic, the development is forecast to take 22 months to complete with all non-abnormal traffic accessing the site via the C46W either from the north (through Straiton village) or from the south (through Glentrool village). Table 11.9 of the EIAR Chapter forecasts that during the construction period a total of 59,028 vehicle movements would be generated, 33,884 of which would be HGV movements.
13. During the 'peak' month of construction there would be 152 vehicle movements per day, of which 104 would be HGVs. With a proposed 12 hour working day (07:00 to 19:00) this would equate to 9 HGV vehicle movements per hour, or one every 7 minutes. This level of impact is completely unacceptable for a rural, protected area and over such a protracted period.
14. The assessment fails to set out what proportion of these vehicles would route to the site via the north or south but given that the main areas where staff / materials would be sourced it is likely that a significant proportion would route through Straiton village.
15. Table 11.12 of the EIAR Chapter forecasts that on the C46W there would be a 1,300% increase in daily HGV movements. Again, this level of impact is completely unacceptable for a rural, protected area.
16. The assessment also fails to assess the cumulative impact of other windfarm proposals in the area such as Knockronal, Craiginmoddie and Dersalloch.
17. A full Road Safety Audit process should have been undertaken by the applicant to show that any proposed changes to the road network to accommodate construction traffic are safe to all road users. There should have been Stage 1 Road Safety Audits submitted with the application, with all further required stages, secured by planning consent / legal agreement.
18. In summary, it is considered that the level of detail submitted in support of the application in terms of traffic and transportation is insufficient for a full assessment to be made. In addition, routing options to the site are inappropriate and have not been assessed to the required level of detail.

## 15 Assessment of Need

1. This section assesses the ‘need’ for additional onshore wind provision which would be provided by the proposed windfarm development at Carrick and demonstrates that such additional onshore wind provision is not required.
2. The most obvious reason why additional provision is not required, was set out in South Ayrshire Council’s supplementary submission on energy and planning policy in relation to the recent Clauchrie Wind Farm application, which stated that:

*"While the Scottish Ministers are setting an ambition for an additional 8-12GW of onshore wind capacity by 2030 it is clear that this can be met by the existing pipeline of consented developments (5GW), with extensions to current consented sites (1.3GW) and by repowering older end of life developments (5GW). Kilgallioch and Arecleoch extensions have been approved since this statement was made. There is therefore no need for additional consents on new virgin site to meet the ambition."*

3. The Scottish Government’s Onshore Wind Policy Statement Refresh 2021: Consultative Draft (October 2021) sets out that the UK currently has 14.1GW of installed onshore wind, with 8.4GW of this in Scotland. Scotland additionally has around 9.7GW of onshore wind currently in the pipeline, spread over 202 different projects comprising;
  - 4.69 GW In Planning/Consenting Process
  - 4.64GW Awaiting Construction, and
  - 0.43 GW Under Construction

4. It is quite obvious from this statement that there is *no* requirement for the proposed Carrick wind farm. Furthermore, with interconnectors full, the grid unable to cope and major wind farms such as Kilgallioch constrained for up to 25% of the time, the question as to where the electricity generated by Carrick will go, must be asked.

5. Prior to wind farms Scotland had clean, reliable, safe nuclear energy providing a constant base load which gave complete energy security. Scotland was a pioneer in this and this clean source should have been expanded, not abandoned. With an estimated lifespan of 25 years, Hunterston B Power Station has been reliably providing electricity for 46 years without problems. Hunterston station director Paul Forrest said:

*"The contribution Hunterston B power station has made to this country cannot be underestimated. As well as providing stable, well-paid employment for thousands of people in the North Ayrshire area, it has produced almost 300TWh of zero carbon electricity, enough to power every home in Scotland for 31 years"*.

6. By contrast, wind power is fickle, unreliable and frequently undeliverable and yet, by virtue of political decisions, Scotland is now almost totally dependent upon it, with its shortcomings covered by imports.
7. After 20 years now of pro-onshore-wind-farm propaganda, it might be encapsulated in the statement made by Ms McKenzie on behalf of Scottish Power Renewables during the Clauchrie inquiry stated that it was their...  
*“...mission is to provide cheap, green electricity for Scottish homes.”*
8. It is worth noting that in 2002, the price of a unit of electricity to a domestic consumer was 6.873p. By 2012, the price of a unit of electricity to a domestic consumer had risen to 13.07p, and by the start of 2022, the price of a unit of electricity to a domestic consumer had risen to around 25.00p. With the announced ‘price cap’ increase in February 2022 of 53% the price of a unit of electricity to a domestic consumer will reach around 40p, which represents an increase of 590% over 20 years. By contrast the retail price index has approximately doubled (100% increase) over the same timeframe. It is noted that during this timeframe there has been considerable uncertainty over supplies and aged fossil fuel burning generation has had to be switched on at short notice to cover shortfalls. With regard the unit cost of electricity, references are made to the relationship with gas prices, presumably because some electricity is made with gas, but for a renewable tariff such as offshore wind, it is questioned how such a relationship can exist.
9. Other points to note are that:
  - currently 25% of the domestic electricity bill comprises green levies and taxes, without which wind farms wouldn’t be built, and that the Scottish Government, and,
  - in 2001 the Scottish Executive published the Housing (Scotland) Act 2001, Section 8 of which (Scottish Fuel Poverty Statement) committed the Scottish Executive's successors to ensuring that, as far as reasonably practicable, people were not living in fuel poverty in Scotland by November 2016. The reality is that by 2020, fuel poverty had doubled to 35% of Scottish households and will likely affect more people in the future.
10. The 2020 Westminster government white paper entitled Powering Our Net Zero Future issued 14 December 2020, listed a ten-point plan for the direction of energy supply to 2050, this included: Nuclear power, Green public transport, walking and cycling, Offshore wind, Hydrogen, Jet zero and green ships, Greener buildings, Protecting the natural environment, Zero emission vehicles, Carbon capture, usage and storage, Green finance and innovation. It did not refer to Onshore wind or Grid expansion as principal influences or pathways, indeed onshore wind is referred to only in passing for the first time some 100+ pages in. One of the principal tenets of the white paper was generation close to where demand lay thus obviating significant grid expansion. The proposed Carrick wind farm does not comply with this vision.

11. By contrast draft versions the Scottish Government's Onshore Wind Policy Statement Refresh 2021, and National Planning Framework 4 have been cited by promoters of onshore wind proposals in their applications, seeking to suggest that these documents change the parameters by which wind farm applications should be considered.

12. In the Clachrie inquiry, Mountaineering Scotland made the following comments

*Scottish Ministers have themselves provided indirect guidance on the weight to be attached to Draft NPF4. In five S.36 wind farm consents issued between 16 and 24 November, after the publication of both draft documents considered here, reference is made in the Decision Letter to the Draft NPF4. The wording varies slightly but all express the same view. Stranoch 2 Wind Farm is typical:*

*"Draft NPF4 was laid in Parliament on 10 November 2021. It does not reduce the current policy support for the proposed Development and given the Draft NPF4 is at the consultative draft stage, Scottish Ministers have given it limited weight."*

*The Decision Letters make brief reference to the original Onshore Wind Policy Statement of December 2017 but none refer to the October 2021 consultative draft refresh. Taking our lead from the limited weight Ministers have attached to the much more coherent and polished Draft NPF4, it is our view that very limited weight should be attached to the Onshore Wind Policy Statement Consultative Draft.*

13. More recently, the UK Government published its Energy Security Strategy on 6<sup>th</sup> April 2022 which majors on nuclear power and offshore wind. The UK Government's ambition is that offshore wind will generate up to 50GW by 2030, which the press release states will be more than enough to power every home in the UK. The hope is that this will be achieved by new planning reforms to cut the approval times for new offshore wind farms from 4 years to 1 year and an overall streamlining which will radically reduce the time it takes for new projects to reach construction stages while improving the environment.

14. With regards onshore wind, the Strategy places this behind new North Sea oil and gas projects, indicating that onshore wind is not the answer to meeting energy needs. It goes on to set out that the UK Government will be;

*"Consulting on developing partnerships with a limited number of supportive communities who wish to host new onshore wind infrastructure in return for guaranteed lower energy bills"*

15. The key phrases here are "limited number" and "supportive communities". Current plans for wind farms across south west Scotland do not reflect this "limited number" and there is no evidence that any of the proposed communities that will be blighted by such development are supportive.



16. In order to provide useful power, Carrick will require (along with other wind farm developments) massive alteration and improvement to the national grid. This is not envisaged by the UK Government's Powering Net Zero white paper, and it is difficult to see how, without significant changes to devolved powers and a major change of heart in Westminster, how the Scottish Government can deliver it unilaterally. Currently the grid is unable to cope with existing wind farms, and other infrastructure is inadequate also.
17. Another key issue to notes relates to the recent ScotWind auction of offshore production capacity. If all the schemes applied for in the recent round of offshore leases auction are built, they will together generate 25 gigawatts of renewable electricity – more than double the Scottish Government's ambitions for 11 gigawatts by 2030 and equivalent to the most ambitious aspirations of the Onshore wind refresh document. That is enough to power more than 18 million homes, with Scotland only currently having around 2.5 million homes. Again, this demonstrates that there is no need for new on-shore wind farms.
18. Related to the issue of need, is the issue of payments to wind power generators. Constraint Payments to wind power generators, paid when the national grid is at capacity, totalled £274 million in 2020, up from £13m in 2011, with costs added to domestic electricity bills. Over the past decade electricity customers have paid windfarms £1bn to switch off turbines. This waste of energy and the extra costs for consumers arise almost entirely from over-provision of capacity in Scotland.
19. Dr John Constable, of the Renewable Energy Foundation, said:

*“It was the choice of windfarm developers to build in remote areas where there's low demand and very little grid. So, the fact that they're constrained off is an entirely foreseeable commercial risk and they really shouldn't be receiving any compensation at all.*

*As it is, the extraordinary thing is that they're actually making more money when they're not generating than when they're generating and selling normally to consumers.”*
20. The Balancing Mechanism, which ensures that supply and demand are in balance hour by hour, was forced to pay up to £4000/MWh to get the coal-fired Drax 5 unit to switch on, at the same time as paying wind farms to switch off. The daily cost of balancing the electricity grid rocketed to £63 million on 24/11/21, surpassing the record of £45 million that had been set at the beginning of November 2021. Wind farms were performing poorly yet again, delivering only 20% of their theoretical capacity.
21. Net Zero Watch's Dr Benny Peiser said:

*The tens of millions that the grid is having to throw at the growing problem of unreliable renewables on days like yesterday are astonishing. £1 million to wind farms to switch off. £5 million to get a single coal-fired unit at Drax to switch on. This is unsustainable.”*



22. The annual cost of the so-called Balancing Mechanism has quintupled in just three years, reaching £1.8 billion in 2020/21 driven primarily by the vagaries of wind speed. But Dr Peiser warns that figure that is likely to be comfortably surpassed in the current year. The Government has done nothing to address the energy crisis, with huge shale gas resources remain untapped while consumers are burdened with £ billions of additional costs in absurd transfers for bailing out inept wind farms.
23. In summary, it has been demonstrated above that additional onshore wind provision as would be provided by the proposed windfarm development at Carrick is not required. In addition, failings of the current windfarm economic case demonstrate that additional onshore wind provision will lead to further, unsustainable costs for consumers.

## 16 Conclusion

In conclusion, taking into account our many concerns about this proposed development, we would ask the ministers to reject this application.