



Scienteuch Wind Farm (Ref: ECU00003318)

Submission by Save Straiton for Scotland -
Objection

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1. Introduction

The Proposed Development Area lies around 1 km to the south of the village of Patna and approximately 3 km to the north-east of the village of Straiton and is located within both the East Ayrshire Council and South Ayrshire Council areas. The Proposed Development Area occupies forested moorland to the west of the River Doon. The majority of the Proposed Development Area is over 200 m above Ordnance Datum (AOD), with a high point at Green Hill (306 m AOD).

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 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 Scienteuch wind farm submitted by RES and have noted numerous and significant concerns. Our concerns are as follows and refer to the relevant chapter of the Environmental Assessment.

2. Landscape & Visual

In the Scoping opinion East Ayrshire stated that *“the Planning authority welcomes the addition of a Residential Visual Amenity Assessment and would request that cumulative schemes are shown on separate wirelines to the project-alone wirelines. Additionally, photomontages should be considered from some properties to assist the consideration and assessment of impacts from them where the turbines are more prominent.”*

The applicant responded that *“the residential visual amenity assessment is included in Technical Appendix 5.4. Wirelines include cumulative schemes. Photomontages have not been undertaken from individual properties.”*

We would question why photomontages had not been produced for individual properties and can only conclude that the opinion of the applicant would be at variance with the occupiers of the properties.

At 5.5.3 the applicant states that “*The Proposed Development Area is forested to the west side of Keirs Hill, with open moorland to the east. A large plantation of Sitka spruce exists to the west of the Proposed Development Area and covers Lambdoughty Hill, Cloncaird Moor and Glenside Hill, from Patna in the north-east to the B741 in the south. Parts of the plantation to the north of the Proposed Development Area have been felled and replanted in 2013. A man-made reservoir, Loch Spallander, lies less than 1 km to the west of the Proposed Development Area, held back by an earth dam. A 275 kV overhead power line runs north-south through a wayleave located in the forestry immediately to the west of the Proposed Development. 5.5.4 To the east, the River Doon meanders through a broad valley, followed by the A713 and a single-track railway. The valley has a history of mineral extraction, which has left its mark on the landscape, most prominently in the former surface mine at Dunston Hill. Patna was established in the early 19th century as a mining town, and an ironworks at Waterside opened in 1848. A heritage railway now operates occasionally at the Scottish Industrial Railway Centre at Waterside. The remains of mineral railways cross the valley sides, and a large bing occupies land to the west of Waterside. 5.5.5 To the south of Dalmellington, the broad Doon Valley becomes narrower, with more intricate hills along the valley sides replacing the smooth slopes around Waterside and Patna. This more intimate part of the Doon Valley is influenced by the designed landscape of Craigengillan. The ground rises to the south of the Proposed Development Area, to a higher plateau with distinct hills including Auchenroy Hill, Turgeny and further west Craigengower which is topped by a monumental obelisk. 5.5.6 To the west of the Proposed Development Area, beyond the broad, forested Scienteuch Moor, is the valley of the Girvan Water. Within the valley is the conservation village of Straiton overlooked by Craigengower to the south. To the north of the village are the policy woodlands associated with the designed landscape of Blairquhan House.*”

This all gives the feeling that this particular site is, in the main, a very rural forested and moorland piece of land bounded by areas which have historical and cultural connections which will be adversely affected by the introduction of tall moving structures. The very use of the words “meanders” to describe the River Doon and “intimate” part of the Doon Valley add to the sense of peacefulness and tranquility associated with this part of the country. While acknowledging too that Straiton is a conservation village there is no consideration given to the close proximity of the Girvan Water which is classed as an Intimate Pastoral Valley. At point 13 it is stated “*Intimate Pastoral Valley (Girvan Water) Although within c.5 km, theoretical visibility from this enclosed valley is limited. Not considered in the assessment.*”

At 5.5.19 it is stated that *“The Proposed Development Area forms part of LCT 17b Foothills with Forest west of Doon Valley. This LCT is identified as being of high sensitivity to very large turbine typology (>130 m” and at 5.5.20 the studies state that “Although the scale and generally simple landform and land cover of these uplands could relate in principle to some larger turbine typologies, the limited extent of these uplands increases sensitivity as they lie relatively close to settled valleys and hills popular with walkers. The studies provide key challenges and opportunities for LCT 17b, which have informed the wind farm design and are discussed in Technical Appendix 5.2: Assessment of Effects on Landscape Receptors.”*

The reporter for the Keirs Hill PLI concluded in 2016 that *“there would be seriously adverse landscape impacts because of the height of the proposed turbines in relation to the scale of the landform on which the site is located. This would be particularly damaging when seen from the Doon Valley and the hills to the south. There would be serious visual impacts for properties at Waterside and the immediate surrounding area, and for parts of Patna. This would be because of the height and proximity of the turbines.”*

This was for turbines of 149m and we would conclude that this would still hold true today and question why the applicant thinks that turbines of 180m and 200m would somehow be appropriate.

At 5.5.22 it states that: The Galloway Dark Sky Park is located within the southern part of the study area. A Dark Sky Park (DSP) is described as a place with exceptionally dark night skies and limited light pollution. The presence of the Proposed Development would not affect this designation, with the exception of aviation lighting.

We would point out that aviation lighting would be a presence at night when it is dark and that is exactly when the Dark Sky Park would be affected by this proposed development. It is not just the actual lights themselves which constitute a threat to the designation of the DSP but the light pollution which is caused too.

We are concerned about the effect on South Ayrshire Local Landscape Areas (LLA) Water of Girvan Valley LLA where there would be widespread theoretical visibility within 15 km. but are told that it is *“considered in the assessment”*.

The Patna to Straiton Core Path passes the proposed development area. This is a popular path for walkers who may not walk the entire route but approach from either Straiton or Patna and walk to Loch Spallender. Core Paths within the Doon Valley will also have theoretical visibility from routes on the east side of the Doon Valley above Patna and Waterside, within 5 km of the Proposed Development Area. When people are out walking, they are doing this to enjoy the peace and quiet of the countryside and the “whump” of the blades and the movement of them turning will be a distraction from this. Core Paths around Straiton will have theoretical visibility from routes south and west of Straiton, within 5 km of the Proposed Development Area. National Cycle Network Route 7 lies approximately 6.3 km west of the Proposed Development Area at its closest point and there will be extensive theoretical visibility within 15 km of the Proposed Development Area. Although the applicant states that these will all be considered this does not take into account why people choose to walk or cycle in these areas. They do not choose to walk or cycle in towns or industrial areas but in the heart of the countryside so that they can enjoy the peace and tranquility afforded by the surroundings.

The next part of chapter 5 deals with the Representative Viewpoints and is set out in Table 5.7: Viewpoint 1 Gass is at the high point of the B741 which connects Straiton and Dalmellington. It gives close range views from the road to the south of the proposed development.

The views at present show an undulating landscape of fields, moorland and forest, what one would expect of a rural area. The photomontage showing the effect of the addition of turbines into the landscape shows how overwhelming they would be, towering above the forest. What should also be taken into account is what would be the cumulative effect were Knockkippen to be consented. North and South Kyle are already consented and in construction so driving over this hill would give the effect of driving through and into one gigantic windfarm.

Viewpoint 2 Waterside, Doon Valley Railway represents views experienced by residents of Waterside to the east of the Proposed Development Area, and visitors to the Doon Valley Railway. Dusk view included.

Again, the present views are of moorland, grassland and the ground rises gently to the forest in the distance. The photomontage shows how dominating the turbines would be in this landscape and the views at dusk do nothing to contradict this idea. There would appear to be little difference between the lighting being at minimum or maximum power as the lights draw the eye to them in either case.

Viewpoint 3 Waterside, north end represents views experienced by residents of Waterside to the east of the Proposed Development Area.

Yet again the present view is of open ground, fields with livestock gently rising to the forest on the horizon. The photomontage gives the impression of the turbines towering over the trees of the forest and splitting the horizon.

Viewpoint 4 Patna represents views experienced by residents and road users. The viewpoint is adjacent to the A713. Dusk view included.

With the cumulative effect of the proposed Knockkippen windfarm these images demonstrate that these unfortunate residents would be effectively sandwiched between the two proposed developments. The dusk views showing minimum and maximum power aviation lighting again draw the eye to the turbines. The only other lighting in these images appears to come from within properties.

Viewpoint 5 Auchenroy Hill represents views experienced by walkers. The hill is marked by a trig point and accessible from the Doon Valley to the east.

There is already cumulative effect from the various windfarms already operational and/or consented however, these are mainly at a distance, unlike Scienteuch at just over 2 km. Scienteuch again shows itself to dominate the landscape and takes away from the sense of emptiness and wildness of the moor and forest.

Viewpoint 6 Lethanhill represents views experienced by walkers on paths providing access to the valley slopes east of Patna, including the site of Lethanhill.

This is a popular walk for residents and visitors alike. Although Dersalloch windfarm is visible from this site it would be dwarfed by the turbines on the Scienteuch proposed development.

Viewpoint 7 Colonel Hunter Blair's Monument, Craigengower represents views experienced by walkers adjacent to a historic monument which is in a prominent location south-east of Straiton.

This is one of the most popular of the Straiton Walks albeit that it takes considerable effort to gain the top because of the steepness of the climb. However, once the top is gained the effort has always been rewarded by the panoramic views stretching as far as the coast and north to Ben Lomond. Looking down across the landscape one has an appreciation of the rural nature of the area with the rough pasture of the hill giving way to fields then to moor and forest. The proposed development would bring alien features into this landscape and be totally at odds with the pastoral scene. Yet again we can see the dominant nature of the turbines as they tower over the forest. Were Knockkippen to be consented this would add to the industrialisation of this rural area. Were Carrick and Knockcronal to be consented then all views from this monument would be over man made machines taking prominence over the historic, timeless features. It is our opinion that the proposed development would have a major impact on the setting of this monument.

Viewpoint 8 Straiton represents views experienced by residents of Straiton from the more open north end of the village.

This view is from the bottom of the churchyard wall, which is listed, as well as the church which is an A listed building. One can see from the images the rural nature of the village and get an understanding of why it is a conservation village. The wireline drawings show that all nine turbines would be seen to a greater or lesser extent yet the photo montage shows only one visible.

Viewpoint 9 Minor road west of Straiton represents views experienced by road users approaching Straiton from the south-west on a minor road, looking across the Girvan valley.

These views will not just be experienced by “road users”, a rather throwaway expression but by residents who live along this road who will have this view every time they leave their property to go anywhere at all. This road is also popular with cyclists and walkers especially from the village who walk in Dyke Woodlands.

Viewpoint 10 Blairquhan represents views experienced by visitors on the drive to Blairquhan. The viewpoint is in the grounds of Blairquhan House, included on the Inventory of Historic Gardens and Designed Landscapes in Scotland.

Firstly, we would correct the name: what the applicant refers to as Blairquhan House is in fact Blairquhan Castle. As can be seen several of the turbines from Dersalloch are already visible. The proposed development will add to the number but also be more intrusive because of the height.

Viewpoint 15 Cornish Hill at 12.5 km represents views experienced by walkers at the edge of Merrick Wild Land Area. The viewpoint is on a hilltop, accessible from the walkers’ car park at Stinchar Bridge. Dusk view included.

Walkers who go to Cornish Hill do so to experience the ruggedness and wildness of the surroundings and, of course, the hill is on the edge of the Merrick Wild Land. From the top no dwellings are visible and the nearest man-made structures which interfere with the sense of wildness are the turbines at Dersalloch. There would be a massive change in the view with the cumulative effect of Dersalloch, Scienteuch (the proposed development), Knockkippen (application) and Knockshinnoch (consented). Gone would be the sense of wildness as the clutter of turbines increased.

The applicant admits at 5.8.8 that *“During operation, significant visual effects are predicted on nine of the 16 representative viewpoints. Significant effects are predicted for sensitive receptors up to 7 km from the Proposed Development. Major and significant effects are predicted from the closest viewpoints including: from the B741 (Viewpoint 1); and from surrounding elevated viewpoints in close proximity where the whole of the Proposed Development will be visible (Viewpoints 5, 6 and 9).”*

We do not agree that *“Effects on views from the other viewpoints examined are not predicted to be significant. This is due either to the screening effect of topography (e.g., views from Straiton (Viewpoint 8) or due to the distance to the Proposed Development (e.g., views from Cornish Hill at the edge of the Merrick WLA (Viewpoint 15).”*

At 5.8.12 the applicant states that *“Although receptors at a number of locations assessed in the RVAA have the potential to experience a significant visual effect, none of these receptors will be subject to effects on residential visual amenity which are judged to breach the Residential Visual*

Amenity Threshold described in LI TGN 2/19. That is, none of the locations would be affected to such a degree that it would be widely regarded as an unattractive place in which to live.”

This is a sweeping statement when residents of these properties have chosen them as their homes because of the views of open countryside from them.

3. Cultural Heritage

At 6.6.10 the applicant states *“the portion of the village of Waterside within the ISA contains 27 heritage assets, including a number of designated heritage assets (see Table 6.4). The various receptors in Waterside village and the Waterside bing (SM7544, Asset 18) are assessed together. These consist of most of the village, which is designated as a conservation area (CA50), within which there are two scheduled monuments (SM4345, 7863), one of which is also a Category A listed building (LB1092), three Category B listed buildings (LB1094, LB6595, LB6623) and two Category C listed buildings (LB1093, LB6596).”*

In 2016 the reporter for the Keirs Hill PLI concluded that *“there would be adverse impacts on the historic estate at Waterside. This would be because of the proximity and height of the turbines which would have an adverse impact on the setting of scheduled monuments, listed buildings and the conservation area”*.

We agree with this conclusion and again submit that the same holds true today. The proposed development would impact severely on the historic nature of the ironworks site and related buildings.

At 6.6.22 and 6.6.24 the setting of the Blairquhan GDL is discussed. The applicant declares that *“Views to east and west from the drive are screened by woodland along most of the route”*, and that *“A considerable portion of the GDL is covered by woodland or screened by woodland. In particular, the main approach to Blairquhan House largely runs through permanent woodland”*.

We would point out that much of the woodland around Blairquhan Castle is policy woodland and consists of deciduous trees and would not form screening for at least half of the year.

4. Ecology

There is no mention in the bat section that the Ayrshire and Arran Bat Group or other relevant bodies with an interest in bats were consulted in the preparation of the EA. The Ayrshire and Arran Bat Group and others may have useful information on bat activity in the area which would complement the applicant's surveys.

The applicant has noted that there were failures in the recording equipment for bats and that there were suboptimal conditions for bat activity during the survey. This would lead to questioning the thoroughness of the survey.

In Table 7.6 the applicant records that the wind turbine impact and collision risk sensitivity for several species was assessed as being high for both. If the survey was incomplete for equipment failure and suboptimal conditions the impact on the populations of several of the bat species could be substantial and underestimated. Bat collisions would be difficult to record and any corpses will be quickly removed by scavengers.

In 7.5.32 the applicant has assessed the size of the proposal as being medium as it consists of fewer than 10 wind turbines (small project size) and has one other operational wind development within 5 km (medium size). It is not clear of the relevance of this assessment and it would seem to imply that the impact is somehow reduced. While the number of turbines at 9 is below 10 the impact of 200m turbines could be considerable and significant. 200m turbines could have a swept area of over 17,000 square meters or 1.7ha. 9 turbines would therefore present a significant obstacle for bats and birds.

In 7.6.9 the applicant records that *'bat activity was recorded across the whole Keirs Hill Wind Farm site, though most activity was in the west of the survey area, particularly near Loch Spallander Reservoir. One small pipistrelle bat roost was located in a building in Keirs Glen, over 1 km away from currently proposed wind turbines and over 250 m from the currently proposed access track. Additionally, the area of broadleaved woodland along Keirs Glen (within 200 m of the currently proposed access track) was assessed to have high potential for bat roosts.'* There is no mention of the probability that bat activity could be considerable in the Meiklehome Glen which contains native shrub vegetation and leads to the River Doon in the valley. There could be a connection along the site boundary to Loch Spallander for bat flights. This is considered to be a serious omission on the applicant's part.

The applicant has concluded that *'Due to the high levels of activity of some bat species within the Proposed Development Area and the rarity of some bat species recorded, the Proposed Development has potential to cause a significant effect on bats.'* To come to this conclusion from such a limited survey would indicate that there is a total disregard for bat species.

In 7.7.4 the applicant states that *‘The layout of the Proposed Development has avoided impacts to sensitive habitats where possible (e.g., modified and blanket bog), and areas of deepest peat and peat slide hazard zones, taking into account other constraints’*.

This statement is hard to reconcile with the presence of deep peat close to turbines 3 and 4. T4 is adjacent to an upland bog with deep peat and a fragile ecosystem. The construction of the turbine and the connecting road has the potential to impact on this bog which is also the origin of a water course which feeds into the Lochhead Burn and then Loch Spallander.

T3 is also adjacent to an area of deep peat and the construction of the turbine and connecting road has the potential to impact on an area of deep peat. It is also adjacent to a water course feeding into the Lochhead Burn. The connecting road from T3 to T1 crosses an area of deep peat and the same burn leading into the Lochhead Burn.

Better siting of the turbines and the connecting road to avoid areas of deep peat should be possible and the applicant should endeavour to redesign the turbine locations and connecting roads.

5. Geology, Hydrology & Hydrogeology

While recognising that the layout of the proposed development has been altered to take into account areas of deep peat we still have reservations on the siting of at least two turbines at the edge of deep peat and find such unacceptable. Therefore, we do not agree that “areas of deep peat have been avoided” as stated at 9.12. Please refer to our comments above in the chapter on Ecology.

6. Forestry

In 10.11.3 the applicant states that the area of conifer woodland would decrease by 52 ha. As is usual with wind farm applications the need for compensatory planting is recognised but the location of this planting is not specified nor the timing or type of replacement woodland. The compensatory planting should be in the local area and specified in the EA.

The applicant has failed to provide details of the compensatory planting as requested in the scoping opinion from the ECU.

In 10.10.9 the applicant states that *'the woodlands would be protected against browsing damage from wild and domestic animals'*. The application area will contain populations of red and roe deer which are currently managed to minimise damage to the woodland and to limit browsing damage on the restocked areas. There should be a deer management plan for deer management to continue and to accord with the NatureScot Code for deer management.

7. Traffic & Transport

- Recent relevant policy / guidance, some in draft form, but which is considered of material importance to the proposal, has not been assessed.
- With regards the main entrance on the A713, it is stated that sightlines of 215m from a 4.5m setback can be achieved looking to the west from the site entrance. This assessment does not take into consideration trees / shrubs around 120m to the west of the site access which will limit sightlines. As such the intensification of the use of this access could represent a road safety hazard.
- At Section 5.5 no detail is provided of the geographical selection applied to arrive at the growth factor.
- Section 5.6 of the EIA Report Appendix set out a review of road traffic accidents. The applicant presents no commentary as to the impact of large slow-moving vehicles that will result from the proposal.
- As part of future year forecasting assessment, other consented windfarm applications have not been included in the EIA Report Appendix.

- Section 6.1.6 of the EIA Report Appendix discusses the distribution of traffic to the site but does not include the number of vehicles that will access the site on a daily / monthly basis via the two proposed access routes.
- The impact of this additional traffic is set out to be ‘significant’ on the A713, but the applicant concludes that the additional 4 HGV movements per hour on the A713 is ‘*not considered significant in terms of total flows*’. No mention is made of cumulative wind farm flows in this section of the EIA Report Appendix. It is noted that to arrive at the figure of 4 additional HGV movements per hour, the applicant has assumed 24 hour working, such that the daily figure of +88 is divided by 24 hours.
- In summary, it is considered that the level of detail submitted in support of the application in terms of cumulative impact with other consented windfarm schemes is insufficient for a full assessment to be made.

8. Noise

We note that low frequency noise was scoped out and do not agree with this. More and more there are studies being done which cite the damage of low frequency noise caused by turbine blades. The experimental turbines at Hunterston were dismantled because of low frequency noise and the damage it was causing to residents’ health in nearby properties.

We also note that the data collected was in 2012, presumably for the Keirs Hill development and query whether it is still relevant to the present proposed development.

We note that 28 properties are within 2kms of turbine when guidelines are for developments to maintain at least a 2km distance. What happened to best practice in this case?

9. Socio-Economics & Tourism

The developer is dismissive of the effect that windfarms have on tourism, not taking into account why visitors choose some areas over others. 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. 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.

Table 13.22 provides information about accommodation providers in the area but it is sadly lacking in what is actually available within the immediate area of Straiton.

From 13.7.64 to 13.6.69 the effect on core paths and National Cycle Route 7 is assessed. These paths and the cycle route are used not just by visitors to the area but also by many residents. Walking and cycling are recognised as being good for promotion of mental and physical health and wellbeing and people enjoy these activities in these surroundings. We would say that the peace and tranquility of the surroundings is of paramount importance to those who undertake these activities and the presence of man-made moving structures along with the noise of the blades would be more than a distraction.

In July 2016 the reporter for the Keirs Hill Enquiry concluded – *“Impacts on tourism and recreation are difficult to be precise about and there is no confirmed evidence as to wind farms deterring tourists from visiting areas where they are located. Despite this the local economy is fragile and communities in the Doon Valley are trying to promote tourist-based growth following the loss of the coal industry. Any small loss of income could have a significant adverse impact on the local economy.”*

It should also be noted that High Keirs Forest, Lammerty Forest and Scienteuch Forest all have deer management policies in place. Recreational stalkers rent the stalking rights in these forests and this too adds to the local economy. Stalkers from the south use accommodation in the Straiton area as well as using the local community shop.

10. Safety & Other Issues

At 15.5.12 it states that *“There are 83 properties within 10 rotor diameters of any wind turbines. Of these, one is unoccupied, eight are occupied and 74 are part of the Carskeoch Caravan Park Housing Development which is currently consented but not built.”*

At 15.5.13 *“Beyond 10 rotor diameters of any wind turbine location, no properties are expected to experience significant shadow flicker.”*

We question the use of the “10 rotor diameters” which applied to smaller scale turbines and has not been increased to take into account the higher turbines and larger blades.

At 15.5.15 it is stated that *“In the event of shadow flicker causing a nuisance, a range of mitigation measures could be incorporated at the operational phase of the Proposed Development to reduce the instance of shadow flicker. Mitigation measures include planting tree belts between the affected residential property and the responsible wind turbine(s), installing blinds at the affected residential property or shutting down individual wind turbines during periods when shadow flicker could occur.”*

Planting tree belts is not going to be an instant solution and the installation of blinds may not be acceptable to the residents but in the summary at 15.5.16 *“It is therefore concluded that the Proposed Development would not cause a significant effect upon amenity due to shadow flicker.”*

11. RVAA Technical (Appendix 5.4)

The RVAA Technical Appendix 5.4 concludes with respect to the Proposed Development *“The magnitude of change of the visual amenity of this property group is high, as there will be direct views of the turbines, and aviation lighting, in views north from the north-facing windows of each of the properties. Views from Glentaggan Bungalow will be effectively filtered by the adjacent mature trees. Although the turbines will occupy an open section of the views from these properties, the distance and spread of turbines is such that Proposed Development will not appear overwhelming or oppressive and will not breach the residential visual amenity threshold.”*

This refers to the three properties comprising of Gass Farm, Gass Cottage and Glentaggan. We would disagree that views from Glentaggan will be filtered by the adjacent mature trees. Since these trees are mature then the chances are that they will be felled long before the proposed development runs its course. Time and time again we point out that trees and shrubs are by no means a permanent screen. The bungalow sits on a high point and looks down on the proposed site.

The effect on the properties in Waterside is also played down.

At A5.4.4.8 it states that *“In all views from Waterside, the turbines will appear on the skyline, above the open pasture on the south-west valley side. The turbines will be viewed as a relatively evenly-spaced array along the simple skyline, with turbines set well back from the valley edge”* and at A5.4.4.15 *“The overall magnitude of change to the visual amenity of properties in Waterside is medium. There will be direct views of the turbines from dwellings and gardens, including within 2 km of the Proposed Development. The proposed turbine array is considered to relate to the open, gently convex skyline of the Doon Valley. The turbines will be set behind the immediate skyline, occupying a relatively small part of the wider view. Some individual properties may have a degree of screening provided by trees and vegetation within or adjacent to gardens, but many properties are relatively open. Aviation lighting on the Proposed Development will be visible from some locations but will be visible at a low intensity.”*

Note that some of these dwellings and gardens are within 2km of the proposed development and again trees and vegetation are cited as screening. How the proposed turbine array can be considered to relate to the *open, gently convex skyline of the Doon Valley* is subject to a feeling of complete disbelief. And they will occupy a *relatively small part of the wider view*, never mind that they are intrusive, out of place, man-made moving structures.

A5.4.4.35 refers to Patna *“When combined with the high sensitivity of the residential receptor, there is the potential for these residential receptors to experience a significant visual effect. However, none of these receptors will be subject to effects on residential visual amenity which are judged to breach the Residential Visual Amenity Threshold described in LI TGN 2/19, i.e., that would affect the ‘living conditions’ or residential amenity of the residents.”*

As already indicated many of these properties are within 2km of the proposed development and may be affected by shadow flicker and noise as well.

12. Assessment of Need

- South Ayrshire Council has set out 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)."*
- 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.
- 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.
- More recently, the UK Government published its Energy Security Strategy on 6th 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. 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.
- In order to provide useful power, Scienteuch 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.
- 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.
- 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.
- In summary, it has been demonstrated above that additional onshore wind provision as would be provided by the proposed windfarm development at Scienteuch 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.

13. Summary

For the above reasons we most strenuously object to the proposed Scienteuch windfarm development and urge the ministers to reject this application. We also wish to bring a case for not allowing further applications for such developments on this site. We understand from the question being put to the Scottish Parliament that all applications have to be dealt with on an individual basis, but consideration should also be given to communities being subjected to the stressful conditions generated by the continual putting forward of applications which will impact on their quality of life.

We respectfully reserve the right to add to this submission at a later date.