

TECHNICAL APPENDIX 2.4: VIEWPOINT ANALYSIS

Introduction

Viewpoint analysis has been carried out from a selection of representative viewpoint locations to inform the assessment of landscape and visual effects arising as a result of the Proposed Development.

Six viewpoints were identified, which were subsequently supported by THC. An additional viewpoint was included at the request of the THC at the B9176, Strathy Junction, as part of the consultation process. These represent a range of views that demonstrate effects on of the most likely sensitive receptors to be affected, and a distant view to show the broader context of the site in the landscape

The locations of the selected viewpoints are shown on **Figures 2.1 - 2.5**. Details for each viewpoint are provided below. Panoramic photographs, photosheets and photomontages are provided to illustrate the existing view at each viewpoint location and the likely extent of the Proposed Development within the view (see **Figures 2.6 - 2.12**). A summary of the viewpoint analysis is provided in Table 2.7 in the main LVA.

This viewpoint assessment considers the nature of the predicted view and the scale of change. The wider extent of the effect (beyond the individual viewpoint considered), and its duration, are not captured in the viewpoint analysis (as a single viewpoint cannot capture extent or duration) and are considered in the LVA report. Extent and duration are factors in the overall judgement on magnitude of change, therefore judgements on magnitude of change and overall level of effect are also provided in the main assessment.

The method of assessment used for the viewpoint analysis, which is described in **Technical Appendix 1**, accords with current best-practice guidance for Landscape and Visual Impact Assessment (Landscape Institute and Institute of Environmental Management, 2013). Observations are made of the baseline landscape and visual characteristics at each of the representative viewpoints. Observations and professional judgement are applied to determine the scale of change attributable to the Proposed Development (**Large, Medium, Small and Negligible**) upon landscape character and visual amenity at each individual viewpoint in order to determine the level of effect.

The visual assessment takes into account the screening effect of intervening landform, vegetation and built form. It assumes excellent clear weather conditions; although the influence of different seasons, weather, sunlight and visibility conditions have been considered, where relevant.

Viewpoint 1	Beinn Tharsuinn Windfarm access track
Distance / Direction from Development	0 km, on the access track and 240 m south of the proposed buildings and structures. The viewpoint is on an existing track, constructed to provide access from the B9176 to Beinn Tharsuinn Windfarm.
Landscape Character Type/Area	LCT 330 Rounded Hills and Moorland Slopes – Ross and Cromarty
Visual Receptors	Users of the track- to access Beinn Tharsuinn Windfarm and to access surrounding hills slopes
Existing View	<p>The access track extends along the southern edge of Cnoc Muigh-bhlaraidh hill, with Meall a Bhreacain visible to the left, as well as the peak of Beinn nan Oighrean. From this location, Beinn Tharsuinn Windfarm is screened by these immediate hills.</p> <p>The main focus of views from this location is to heather covered hill peaks and slopes in all directions, with more open and distant views along the strath to the south and Dornoch Firth to the east.</p>
Predicted View & Scale of Visual Effect	<p>Access to the track would be limited during construction, and it is likely recreational users would not be able to use the track at this stage as it falls within the site boundary.</p> <p>For people using the track to access Beinn Tharsuinn Windfarm, there would be a Large scale of visual effect during construction, given the open and uninterrupted view to the building works, particularly along the southern part of the site.</p> <p>The Large scale of change would continue through to the operational stage, and this is largely due to the limited separation distance. The Proposed Development would be seen below the height of hill slopes, with the exception of the top of the electrolyser building, seen above Cnoc Muigh-bhlaraidh. Mitigation, in the form of the finish colour, would help somewhat to blend the proposed buildings and fencing into its surrounds, however it would remain a focal point in the view.</p>
Scale of Change to Landscape Character	<p>The Proposed Development would change the character of the view both during construction and at completion, with a Large scale of change. The addition of the Proposed Development would add another built feature in the landscape as well as changes to the hill slope and openness towards the peak of Cnoc Muigh-bhlaraidh. In addition, the skyline would be slightly altered as the electrolyser building would appear above the height of Cnoc Muigh-bhlaraidh.</p> <p>The Proposed Development would be a notable change locally, and a prominent feature in the view.</p>
Cumulative effects	<p>The cumulative baseline includes the existing wind farms of Beinn Tharsuinn and Beinn nan Oighrean and the consented Strathrory Windfarm. From this location, the turbines of Beinn Tharsuinn and Beinn nan Oighrean are screened by the intervening hills, although the Proposed Development would be seen in successive views with the consented Strathrory Windfarm. Once built, Strathrory Windfarm would be located approximately 5 km south and in the opposite direction to the Proposed Development.</p>

Viewpoint 2	B9176
Distance / Direction from Development	0 km, east of the access track and 1.8 km east of the proposed buildings and structures. The viewpoint is located adjacent to the B9176, at the roadside access to Beinn Tharsuinn Windfarm.
Landscape Character Type/Area	LCT 330 Rounded Hills and Moorland Slopes – Ross and Cromarty
Visual Receptors	Road users on the B9176 and the Moray Firth Tourist Route
Existing View	<p>The rounded peak of Cnoc Muigh-bhlaraidh is a visible to the right of the image, and heather covered hills extend further north, outwith the existing view. To the south, dense blocks of pine plantation are visible across the strath.</p> <p>Pylons, along with clumps of and scattered trees appear as focal points in the fore and middle grounds. There is a contrast between the more natural landform and cover and built features, including the B-road, entrance to the access track to Beinn Tharsuinn Windfarm, fencing and pylons throughout the view.</p> <p>From this location and beyond, there are views north, which align with the B-road, and east to rugged hills and more distant views east to the Dornoch Firth. Views in these directions are the focal point from this viewpoint location.</p>
Predicted View & Scale of Visual Effect	<p>During the building stage, construction traffic accessing the Beinn Tharsuinn Windfarm track and works on the hillside would be visible from this location, with a clump of trees providing some, although limited screening of lower slopes. The scale of change at this stage would be Medium, which would reduce to Small when the Proposed Development is in operation.</p> <p>The Proposed Development, particularly the length of the eastern side of the electrolyser building is visible, although not as obvious as more immediate pylons and fencing, and the hillscape. From this location, the setting of the Proposed Development, seen between and against hill slopes and its rendered finish would help it to blend into its surroundings.</p>
Scale of Change to Landscape Character	The scale of landscape change would be Medium during the building stage, with increased traffic and activity at this location and along lower hill slopes; and given the limited screening vegetation. The scale of change would reduce to Small during the operational stage and permanently, as the Proposed Development would be visible in a view dominated by roadside vegetation and rounded hills, particularly Cnoc Muigh-bhlaraidh.
Cumulative effects	The cumulative baseline includes the existing wind farms of Beinn Tharsuinn and Beinn nan Oighrean and the consented Strathrory Windfarm. From this location, the turbines of Beinn Tharsuinn and Beinn nan Oighrean are screened by intervening hills, and the Proposed Development would be seen in successive views with the consented Strathrory Windfarm. Once built, Strathrory Windfarm would be seen in views south, at a distance of 5 km, with turbines filtered by scattered roadside vegetation.

Viewpoint 3	B9176, Aulnamain
Distance / Direction from Development	570 m, east of the access track and 2.1 km east of the proposed buildings and structures. This viewpoint is located adjacent to the B9176 road, south of the hamlet of Aulnamain.
Landscape Character Type/Area	LCT 330 Rounded Hills and Moorland Slopes – Ross and Cromarty
Visual Receptors	Road users on the B9176 and the Moray Firth Tourist Route
Existing View	<p>Cnoc Muigh-bhlaraidh is a feature in a view with a strong horizontal plane, with the repetition of rounded hills at similar heights to the left of the image and dense pine plantation, which defines the middle ground. To the fore of this plantation, a field set to pasture is visible to the right of the image, but this part of the existing view is dominated by heather and grassland, which add seasonal interest.</p> <p>Like Viewpoint 2, the more natural landform and landcover is in contrast to the roadside fencing, line of pylons and the tips of turbines forming Beinn Tharsuinn Windfarm, visible between the hill slopes of Cnoc Muigh-bhlaraidh and Meall a Bhreacain. The main focus of view from this location is to the northeast and east, towards rugged hills and the Dornoch Firth.</p>
Predicted View & Scale of Visual Effect	During construction, the building works would be visible above the height of and partly screened by intervening pine plantation, constituting a Small scale visual effect. This would remain permanently as the Proposed Development would form an additional built feature in the view, although seen below the skyline and surrounded by hill slopes. From this location, the pine plantation softens the view to the Proposed Development and the rendered finish would reduce its visual presence.
Scale of Change to Landscape Character	<p>The scale of change to the character would be Small during construction and permanently, given the extent of screening by intervening vegetation to lower hill slopes and the Beinn Tharsuinn access track.</p> <p>The Proposed Development would be an additional built feature in the landscape and a perceptible change locally, but would not dominate the wider landscape, which is characterised by the rounded hills, and extensive moorland and plantation vegetation.</p>
Cumulative effects	<p>The cumulative baseline includes the existing wind farms of Beinn Tharsuinn and Beinn nan Oighrean and the consented Strathrory Windfarm. From this location, the Proposed Development would be seen in combination with and to the fore of Beinn Tharsuinn Windfarm. The hubs and blades of three turbines that form this wind farm are visible between the slopes of Cnoc Muigh-bhlaraidh hill and Meall a Bhreacain.</p> <p>Strathrory Windfarm would also be visible in successive views south, and at a distance of approximately 5 km, in the opposite direction to the Proposed Development.</p>

Viewpoint 4	Unclassified road west of Balleigh
Distance / Direction from Development	1.9 km, northeast of the access track and 6.3 km northeast of the proposed buildings and structures. This road connects scattered properties between the B9176 and the small settlement of Balleigh.
Landscape Character Type/Area	LCT 341 Forest Edge Farming
Visual Receptors	Road users
Existing View	<p>Like Viewpoint 4, Cnoc Muigh-bhlaraidh is a feature in this slightly elevated view, and from this location the transition from rounded hills to the strath is visible. There is a sense of naturalness formed by the broad heather covered hills and slopes, however, this is in contrast with roadside fencing and scrub including small self-seeding trees and gorse, which define the route of the unclassified road. Pylons are also visible throughout the view, although those in the distance are not as apparent as the pylon to the right of the image, which extends above the ridgeline and at a similar height to the peak of Cnoc Muigh-bhlaraidh.</p> <p>The viewpoint is located at the crest of the road and the slope to the east reveals the main view from this location to the Dornoch Firth.</p>
Predicted View & Scale of Visual Effect	Due to the angle of view and intervening landform- the eastern slope of Cnoc Muigh-bhlaraidh, construction activity would be barely perceptible and the Proposed Development as built would not be visible from this location. As the viewpoint is located at the crest of this stretch of the road, there would not be visibility for approximately 200 m either side of this location, up until the road rises near plantation further east or as the road bends, to the east.
Scale of Change to Landscape Character	As the Proposed Development would not be visible from this viewpoint, there would be no change to the character of the landscape, as seen in the view and within the wider context.
Cumulative effects	The Proposed Development would not be visible from this location; and would not be visible with any relevant cumulative sites.

Viewpoint 5	Beinn Tharsuinn
Distance / Direction from Development	4.0 km south-west of the site. The viewpoint is located at summit of Beinn Tharsuinn.
Landscape Character Type/Area	LCT 330 Rounded Hills and Moorland Slopes – Ross and Cromarty
Visual Receptors	Recreational receptors
Existing View	<p>From this elevated viewpoint, there are sweeping views across the surrounding landscape, which transitions from rounded hills towards the strath and coastal spaces. There is a sense of naturalness in the view, given its location and with the muted colour of surrounding heather covered hills and long view across the Dornoch Firth. This is in contrast to the turbines of Beinn Tharsuinn Windfarm, which although prominent, appear below the height of surrounding hills from this location, as well as regular and structured shapes of pine plantation within the strath. Scattered settlements, properties and pylons are also visible but appear as minor elements from this elevated viewpoint and within an extensive view.</p> <p>From this location, there are panoramic views in all directions, although views to the northeast (towards the site) and east towards the Dornoch Firth are the main view from this location.</p>
Predicted View & Scale of Visual Effect	<p>There would be a Medium scale of visual effect during the construction period, given the elevated view to machinery and the building works. At this stage, the movement of traffic and construction activity would draw attention to the site.</p> <p>This scale of change would reduce to Small once the Hydrogen Production Facility is operational. The Proposed Development would remain visible from this location and form an additional built feature in this view. Although, it would be seen at a distance of 4 km, with the lower parts of nearer buildings and structures screened by the rolling hill slope, and the entirety of the Proposed Development seen below the height of hill tops further north. The rendered finish would also help the proposed buildings and fencing settle into its surroundings.</p>
Scale of Change to Landscape Character	<p>There would be a Small scale of change as the Proposed Development would change the character of the view during construction and completion, adding another built feature to the landscape.</p> <p>The Proposed Development would be a notable change locally but would not form a prominent feature in the wider landscape.</p>
Cumulative effects	<p>The cumulative baseline includes the existing wind farms of Beinn Tharsuinn and Beinn nan Oighrean and the consented Strathroy Windfarm. From this location, the cluster of turbines at Beinn Tharsuinn and Beinn nan Oighrean are visible with seven turbines seen to the north of the site, in the existing view. Further south, the consented Strathroy Windfarm would be visible in successive views with the Proposed Development, and at a similar separation distance.</p>

Viewpoint 6	Unclassified road at Rhanich
Distance / Direction from Development	4.6 km east of the access track and 6.4 km east of the proposed buildings and structures. This viewpoint is towards the base of a hill with extensive pine plantation.
Landscape Character Type/Area	LCT 341 Forest Edge Farming
Visual Receptors	Road users
Existing View	<p>From this location, views are focused to the north and northwest (towards the site), with hill slopes and dense pine plantation restricting views in other directions. Plantation in the middle ground of the existing view creates a defined line and separation between the hills in the distance and fields set to pasture and grassland in the fore. The colour and texture of grassland visible forms seasonal interest in this view and reduces the presence of the timber post and wire fencing adjacent to the road.</p> <p>The upper parts of turbines forming Beinn Tharsuinn Windfarm are visible to the left and seen below the height of Cnoc Muigh-bhlaraidh. Within the existing view, these turbines are seen against the backdrop of hill slopes and are thereby more apparent, although given the separation distance, are not the main feature in views from this location.</p>
Predicted View & Scale of Visual Effect	During construction, the building works would be seen, as a short stretch of the Beinn Tharsuinn Windfarm access track is visible, as well as the southeastern extents of the site. There would be a Small scale of visual effect during this stage, which would remain while the Hydrogen Production Facility is in operation. Along with existing turbines, the Proposed Development would add another built feature to the view. However, it would appear as a minor addition, seen at a distance of 6.4 km, against the backdrop of hill slopes, and in a view dominated by the surrounding hills and more dramatic peaks to the north.
Scale of Change to Landscape Character	The scale of change to the character would be Small during construction and permanently, given the separation distance and extent of visibility to the site, which would be to the southeastern extents. The Proposed Development would be a notable built feature in the landscape; however, it would be a local change in a view dominated by the rounded and rugged peaks of the wider landscape.
Cumulative effects	<p>The cumulative baseline includes the existing wind farms of Beinn Tharsuinn and Beinn nan Oighrean and the consented Strathrory Windfarm. From this location, the Proposed Development would be seen in combination with and to the fore of Beinn Tharsuinn Windfarm. The majority of the towers, as well as the hubs and blades of three turbines that form this wind farm are visible between the slopes of Cnoc Muigh-bhlaraidh hill and Meall a Bhreacain, along with the blades of another turbine. These turbines are visible beyond the Proposed Development, with the hubs and blades of a further six and blades of two turbines seen to the south of the site.</p> <p>Given the intervening landform, particularly Cnoc an t-Sabhail to the southwest and Cnoc Muigh-bhlaraidh, immediately adjacent to the site, the turbines at Beinn nan Oighrean and consented for Strathrory wind farms would not be visible from this location.</p>

Viewpoint 7	B9176 at Strathy Junction
Distance / Direction from Development	5 km, south of the access track and 5.6 km south of the proposed buildings and structures. The viewpoint is located at the junction of the B9176 and a minor road leading to Strathy.
Landscape Character Type/Area	LCT 341 Forest Edge Farming
Visual Receptors	Road users
Existing View	<p>The main view from this location is to the north (towards the site) with the surrounding slopes and dense plantation reducing visibility in other directions. The existing view is framed by pine plantation on either side and the view is drawn towards Cnoc Muigh-bhlaraidh and Meall a Bhreacain.</p> <p>Grassland and fields set to pasture extend across the fore and middle grounds, although built elements dominate the view. The line of pylons, telegraph pole and roadside fencing are prominent features in the immediate landscape, given the limited separation distance and angle of view from this location. The turbines of Beinn Tharsuinn Windfarm are visible towards the centre of the view, seen against the backdrop of sky and at/ below the height of surrounding hills and plantation.</p>
Predicted View & Scale of Visual Effect	The site would not be visible, given the low-lying location of the viewpoint and angle of view towards the hillscape. The Proposed Development is screened by a hill (as indicated on the bare ground ZTV, Figure 2.4), which rises to 300 m, to the immediate south of Cnoc Muigh-bhlaraidh.
Scale of Change to Landscape Character	As the Proposed Development would not be visible from this viewpoint, there would be no change to the character of the landscape, as seen in the view and within the wider context.
Cumulative effects	The Proposed Development would not be visible from this location and would not be visible with any relevant cumulative sites.