

APPENDIX 13-3

Cleanrath 191223-a:

Assessment of Photomontages

Table 1-1 Viewpoint Locations

VP No.	Description	Grid Reference Co-ordinates	PL No. Reference to 2015 EIS
01	Local road outside Reananerree village, approximately 2.53 kilometres north of nearest turbine location.	E:120814 N:72602	10
02	Local road outside Killnamartery village, approximately 5.29 kilometres northeast of nearest turbine location.	E:126029; N:72141	9
03	Local road in townland of Lisboy More, approximately 2.40 kilometres east of nearest turbine location.	E:123619; N:69924	21
04	Local road in townland of Carrignaneelagh, approximately 5.90 kilometres southeast of nearest turbine location. Located on Scenic Route 35.	E:126832; N:67409	16
05	R584 Regional Road outside Inchigeelagh, approximately 3.32 kilometres southeast of nearest turbine location.	E:122156; N:65986	3
06	Local road on the southern shore of Lough Allua, approximately 3.60 kilometres southwest of nearest turbine location. Located on Scenic Route 32.	E:118964; N:65396	7
07	Local road in townland of Kealvaugh More, approximately 5.78 kilometres southwest of nearest turbine location. Located on Scenic Route 33.	E:115313; N:65369	12
08	Local road in townland of Gortnaloughra, approximately 8.32 kilometres southwest of nearest turbine location. Located on Scenic Route 27.	E:111366; N:67623	15
09	Local road in townland of Keamcorravooly, approximately 5.72 kilometres southwest of nearest turbine location.	E:113972; N:68000	25
10	Local road in townland of Derryfineen, approximately 2.88 kilometres northwest of nearest turbine location.	E:117987; N:72098	11
11	N22 National Primary Road between Ballyvourney and Ballymakeery, approximately 6.89 kilometres north of nearest turbine location. Located on Scenic Route 23.	E:120373; N:76937	17

1.1

Visual Effects: Mitigating Factors:

The locations chosen for photomontages follow a detailed and extensive process including review of baseline information, site visits and high-quality photo taking at multiple locations within the LVIA study area. Many locations, which based on a desktop review had the potential for views of the site, had complete intervening screening or were screened to such an extent that the development of photomontages was not considered useful in terms of the assessment process i.e. little or no visibility towards the Cleanrath wind farm development. It is therefore considered important to describe the nature of the Cleanrath wind farm development site and surrounds in order to provide context for this and avoid repetition in the viewpoint assessment tables below.

In general, Mountain Moorland wind farm sites tend to be capable of absorbing suitably designed wind farm projects of scale. Key reasons enabling the Cleanrath wind farm development to be effectively absorbed by the landscape of the site and surrounding area are outlined below, is evident on the ground and illustrated in the photomontages:

1. ***Topography and Positioning of the Site on a Hilltop Ridge***
Topographical landform screens most visibility from the central and northern locations of the Landscape Character Area within which the site is located. In general, the surrounding high mountainous landscape contributes to obscuring views from various sensitive receptors and also forms a backdrop when viewing the turbines from certain sectors (See the ZTV and VP 02, 03, 04 and 05 as examples). Visual clutter and confusion are avoided as the topography ensures minimal overlapping with other landscape elements such as buildings, roads, power or telegraph poles. The exposed and remote nature of the Cleanrath wind farm development enables the landscape to absorb the scale of the wind farm in comparison to any surrounding forestry and settlements, mitigating the potential for overbearing or domineering effects whilst providing adequate setback from visual receptors.
2. ***Presence of Commercial Forestry and surrounding Agricultural Land***
Stands of commercial forestry are a prominent feature to the north of the Cleanrath wind farm development, also, agricultural land and roads in surrounding landscape areas are regularly bordered by hedgerows and pockets of woodland or shrub. Located between visual receptors and the Cleanrath wind farm development turbines, these vegetational elements of the landscape provide screening, obscuring large numbers of turbines or making those views of the turbines intermittent in nature. The ZTV does not take into account this screening and hence ZTV mapping can only be considered accurate where no visibility is indicated. In areas where theoretical visibility is indicated, actual visibility on the ground was often diminished by screening factors.
3. ***Mountain Ranges and Steep Glaciated Valleys***
The landscape to of the LVIA study area (particularly to the west, north-west and south-west) are composed of steep glaciated valleys and mountainous terrain; the location of settlements and transport networks in these areas tend to be located on lower ground within the valleys where views of the Cleanrath wind farm development are mostly screened by the topography and landform. Where the ZTV mapping indicates full visibility in these areas, it is typically confined to higher elevations on valley ridges where the presence of visual receptors is reduced, therefore, the visual and landscape effects of the Cleanrath wind farm development in these areas are greatly limited.

1.2

Viewpoint Selection

The chosen photomontage locations are consistent with the previously permitted planning application (PL Ref: 15/06966), providing continuity and the capacity for direct comparison with the previous LVIA images. Any viewpoint locations submitted for the previously permitted planning application (Ref: 15/06966) that did not demonstrate actual visibility of the Cleanrath wind farm development were excluded from selection. The as-built Cleanrath wind farm development has 2 No. less turbines than the previously proposed development and will therefore have less visibility than the turbine layout originally proposed.

Viewpoint 01 – Reananerree			
Viewpoint Description and Details	<ul style="list-style-type: none"> ➤ View from a local road outside the village of Reananerree in the townland of Reananerree. ➤ County Cork Scenic Route 26. ➤ 2.53 km north of the nearest turbine. ➤ Grid Reference: E:120814; N:72602 ➤ No. of turbines visible: 9/9 		
LCA and Sensitivity	12a - Rolling Marginal Middleground - Moderate	Visual Receptor(s) and Sensitivity	Designated Scenic Route - High ; Local Traffic - Medium ; Residents - Medium .
Baseline Description	<p>The foreground of this viewpoint comprises of grassland dominated by gorse scrub, singular trees and a coniferous treeline to the left of the image. Small fields and deciduous tree clusters are visible in the middle ground along with large tracts of coniferous forestry plantations. Beyond this the ground rises to a moorland-covered hill in the centre of the image. To the right of the hill there are long-distance expansive views through an open valley towards the mountainous backdrop of the Shehy Mountains. To the left of the image are more gently sloping hills substantially covered by coniferous forestry.</p> <p>The under construction Carrigariark Wind Farm will appear behind the Cleanrath wind farm development and the existing Derragh turbines to the far right. Some of the under construction Shehy More Turbines are theoretically visible to the right of the Cleanrath wind farm development turbines, although they are unlikely to be discernible.</p>		
Photomontage Description	<p>All turbines of the Cleanrath wind farm development are clearly visible in the view. The towers of Turbines T7 and T9 are partially obscured by the intervening landform of Derrineanig Hill. The turbines are seen as a regularly spaced line with no visual stacking. Almost all the blade arcs are seen to be above the horizon (Turbine T4 just below the horizon), therefore there is very minimal overlap with the background landscape. The viewpoint location is in close proximity to the Cleanrath wind farm development which is reflected in the scale of the turbines in the photomontage and the spatial extent of turbines within the view. However, the simple structure of this mountain moorland landscape helps to visually absorb the Cleanrath wind farm development from this location.</p>		
Cumulative Effects	<p>The photomontage demonstrates that the hubs and blades of at least four turbines from the Carrigariark Wind Farm (currently under construction) will be seen above the horizon behind the Cleanrath wind farm development. These turbines will not increase the horizontal spatial extent of turbines visible from this location. The distance between the nearest turbines of Carrigariark and the Cleanrath wind farm development is approximately 7 km, consequently the difference in scale is very obvious and the wind farms are easily distinguished as separate developments.</p> <p>One of the existing Derragh turbines will be seen to the far right of the Cleanrath wind farm development turbines, but cumulative visual effects are minimal as they are adequately visually separate. Some of the under construction Shehy More Turbines are theoretically visible to the right of the Cleanrath wind farm development turbines, although they are unlikely to be discernible. Overall cumulative visual effects are deemed to be Slight.</p>		
Sensitivity of Visual Receptor(s)	Medium: Includes viewers travelling the designated scenic route, viewers such as residents of Reananerree village who live in medium proximity to the		

Viewpoint 01 – Reananerree	
	viewpoint. There is minimal regular traffic and therefore limited visual receptors along this local road. The LCT is not considered a High Value Landscape and only has a Moderate sensitivity to wind farm development.
Magnitude of Change	Moderate: The change in the view may involve partial obstruction of existing view or partial change in character and composition of the baseline through the introduction of new elements or removal of existing elements. Likely to occur at locations where the development is partially visible over a moderate or medium extent, and which are not in close proximity to the development. Change may be readily noticeable but not substantially different in scale and character from the surroundings and wider setting.
Significance of Effect	Medium X Moderate = Moderate/Minor = Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends.
Mitigation Factors	<ul style="list-style-type: none"> ➤ The Cleanrath wind farm development is suitably sited to avoid visual stacking and reads as a coherent understandable element of the landscape. ➤ Most turbine blades and all turbine nacelles are viewed above the horizon and do not significantly obstruct or interfere with any views from this perspective, eliminating the potential for visual confusion. ➤ This is an open and expansive view of a location designated for wind energy development, the Cleanrath wind farm development is appropriately scaled and absorbed effectively within the landscape. ➤ Road users will be travelling in a direction perpendicular to the Cleanrath wind farm development and the focus of their view will not be focussed towards the turbines of the Cleanrath wind farm development.
Residual Effect (incl. mitigating factors)	Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends

Viewpoint 02 – Kilnamartery			
Viewpoint Description and Details	<ul style="list-style-type: none"> ➤ View from a local road outside the village of Kilnamartery in the townland of Ballyvoge. ➤ 5.3 km north-east of the nearest turbine. ➤ Grid Reference: E:126029; N:72141 ➤ No. of turbines visible: 9/9 		
LCA and Sensitivity	13a - Valleyed Marginal Middleground - Moderate	Visual Receptor(s) and Sensitivity	Local Traffic - Medium ; Residents - Medium .
Baseline Description	<p>This viewpoint is located on elevated ground and shows an open landscape with extensive panoramic views. Undulating pastoral farmland of fields interspersed with trees and scrub along with farm buildings makes up the foreground of this view. The undulating landscape continues to the middle distance where it is populated by areas of mixed woodland and denser vegetation. The background of this view is formed by a dramatic mountain range visible beyond the Cleanrath wind farm development to the distant south-west.</p> <p>Numerous existing turbines are theoretically visible from this location, however, only the Carrigariork (under construction), Shehy More (under construction) and Derragh turbines are likely to be discernible.</p>		
Photomontage Description	<p>The photomontage image shows all turbines of the Cleanrath wind farm development in the centre of the view with Turbine T7 slightly screened by intervening landform. From this location most of the turbines are seen nestled amongst hills in the middle ground of this view against a backdrop of distant mountains. The Cleanrath wind farm development is seen as a coherent cluster of turbines with the tip heights vertically aligned and no visual stacking. The open panoramic view also helps accommodate the turbines within the landscape.</p>		
Cumulative Effects	<p>The Carrigariork and Shehy More Wind Farms (under construction) are both seen in the distance to the left of the image and an array of wind farms can also be seen to the very right of the view. From this location, the wind farms to the right are only just discernible in the image and are considered insignificant features of the landscape.</p> <p>All turbines of the operational Derragh Wind Farm are clearly visible in a cluster to the right of the Cleanrath turbines, although some turbines are partially screened by intervening landform. A saddle of lower elevation between the upland areas upon which both wind farms are sited clearly distinguishes them as separate entities.</p> <p>The recently proposed Curraglass Wind Farm is also included into the 90° cumulative photomontage. Four of these turbines are evident in the distance directly behind the Cleanrath wind farm development from this perspective. The difference in scale clearly defines each wind farm as developments that are independent from each other. Some visual stacking is likely to occur for turbines T4 and T8 with background turbines of the proposed Curraglass development, although the turbine behind T4 is partially screened by topography. Cumulative visual effects between these two developments and any potential for visual confusion will be significantly mitigated by distance from this viewpoint location. Overall cumulative visual effects are deemed to be Slight to Moderate.</p>		

Viewpoint 02 – Kilnamartery	
Sensitivity of Visual Receptor(s)	Medium: The primary visual receptors at this location are local residents of Kilnamartery and the surrounding townlands in medium proximity to the viewpoint. There is limited regular traffic and therefore limited visual receptors along this small local road. The LCT is not considered a High Value Landscape and only has a Moderate sensitivity to wind farm development.
Magnitude of Change	Moderate: The change in the view may involve partial obstruction of existing view or partial change in character and composition of the baseline through the introduction of new elements or removal of existing elements. Likely to occur at locations where the development is partially visible over a moderate or medium extent, and which are not in close proximity to the development. Change may be readily noticeable but not substantially different in scale and character from the surroundings and wider setting.
Significance of Effect	Medium X Moderate = Moderate/Minor = Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends.
Mitigation Factors	<ul style="list-style-type: none"> ➤ Open and expansive view of a location designated for wind energy development. ➤ The Cleanrath wind farm development is suitably sited to avoid visual clutter. ➤ The Cleanrath wind farm development is appropriately scaled and absorbed effectively within the landscape as the turbines are viewed against a backdrop of distant mountains. ➤ The surrounding landscape in the vicinity of this viewpoint is highly vegetated, visibility of the Cleanrath wind farm development in the surrounding area was significantly restricted by vegetation screening, specifically roadside hedgerows. ➤ Road users will be travelling in a direction perpendicular to the Subject, Development and the focus of their view will not be focussed towards the turbines of the Cleanrath wind farm development.
Residual Effect (incl. mitigating factors)	Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends

Viewpoint 03 – Lisboy More			
Viewpoint Description and Details	<ul style="list-style-type: none"> ➤ The view from a local road in the townland of Lisboy More. ➤ 2.4 km east of the nearest turbine. ➤ Grid Reference: E:123619; N:69924. ➤ No. of turbines visible: 9/9 		
LCA and Sensitivity	LCT 12a - Rolling Marginal Middleground - Moderate	Visual Receptor(s) and Sensitivity	Local Traffic - Low ; Local Residents - Low .
Baseline Description	<p>This viewpoint is located at a low elevation in close proximity to the Cleanrath wind farm development, the view looks upwards towards two nearby hills seen in the centre and left of the image. The view shows an area of flat heath in the foreground which is scattered with young trees and shrubs. A single-track road to the right of the view is lined by scrub and trees. As the landscape slopes up away from the viewpoint the middle ground comprises of a relatively dense canopy of immature deciduous woodland stretching up to the hilltop in the centre of the image. To the left of the image, tracts of coniferous forestry and mountain moorland occupy the areas of higher ground in the background. No other wind farms can be seen in this view.</p>		
Photomontage Description	<p>All turbines of the Cleanrath wind farm development are partially visible in this photomontage. Most towers and lower blade arcs are not visible due to screening by intervening landform and trees. Only the blades of Turbines T5 and T9 are visible. All turbines are seen as a coherent, fairly evenly spaced cluster. They are centred around and on top of a local hill, thus appearing visually balanced and in proportion to the local landscape. They do not obstruct or interfere with any landscape views. No other wind farms can be seen in this photomontage.</p>		
Cumulative Effects	Cumulative visual effects do not arise from this viewpoint.		
Sensitivity of Visual Receptor(s)	<p>Low: This viewpoint is located on an isolated local road directed away from the Cleanrath wind farm development, therefore the sensitivity from visual receptors such as local residents and local traffic is low. The landscape only has a Moderate sensitivity to wind farm development.</p>		
Magnitude of Change	<p>Moderate: The change in the view may involve partial obstruction of existing view or partial change in character and composition of the baseline through the introduction of new elements or removal of existing elements. Likely to occur at locations where the development is partially visible over a moderate or medium extent, and which are not in close proximity to the development. Change may be readily noticeable but not substantially different in scale and character from the surroundings and wider setting.</p>		
Significance of Effect	<p>Low X Moderate = Minor – Slight (EPA, 2017) An effect which causes noticeable changes in the character of the environment without affecting its sensitivities</p>		
Mitigation Factors	<ul style="list-style-type: none"> ➤ The Cleanrath wind farm development is significantly screened by intervening topography and vegetation. ➤ This road and other receptors in the surrounding area are bordered by an abundance of trees, bushes and scrub which regularly screens the Cleanrath wind farm development from view. 		
Residual Effect (incl. mitigating factors)	<p>Slight (EPA, 2017) An effect which causes noticeable changes in the character of the environment without affecting its sensitivities</p>		

Viewpoint 04 – Carrignaneelagh			
Viewpoint Description and Details	<ul style="list-style-type: none"> ➤ View from a local road in the townland of Carrignaneelagh. ➤ County Cork Scenic Route 35. ➤ 5.90 km south-east of the nearest turbine. ➤ Grid Reference: E:126832; N:67409 ➤ No. of turbines visible: 9/9 		
LCA and Sensitivity	LCT 13a - Valleyed Marginal Middleground - Moderate	Visual Receptor(s) and Sensitivity	Designated Scenic Route - High ; Local Traffic - Medium ; Local Residents - Medium .
Baseline Description	<p>The viewpoint is located on County Cork Scenic Route 35 on the relatively high elevation of Kilbarry Hill. The view shows an open and extensive landscape, undulating in the foreground with a mountainous backdrop. In the foreground the road is lined by grass verges, overgrown hedgerows and scrub. The landscape in the valley seen in the middle ground is a mixture of pastoral fields, woodland and scrub with several residential dwellings. Large coniferous forestry plantations are visible in front of the Cleanrath wind farm development and other areas throughout the view.</p> <p>Numerous existing, permitted and proposed turbines are theoretically visible in the distance, however, only the Derragh turbines behind the Cleanrath wind farm development are clearly seen. Some turbine components of the existing Grousemount/Barnastooka Wind Farm and Coomagearlachy-Kilgarvan Wind Farm are just discernible above the horizon to the left and right of the view.</p>		
Photomontage Description	<p>All the turbines of the Cleanrath wind farm development are visible from this location, however, turbine T10 is partially screened with only the blades being visible above the ridge and forestry. Most turbines of the Cleanrath wind farm development are seen as a coherent cluster upon the higher ground and are accommodated well within the wide-ranging landscape views available from this area. Turbines T1 and T3 are slightly separated from the main cluster to the right of the image and there is visual stacking of these two turbines. Blade overlap occurs between turbines T4 and T5 although there is sufficient spacing that visual confusion is minor. Turbines from the Derragh Wind Farm are visible beyond the Cleanrath wind farm development in the distance to the west.</p> <p>The majority of the turbines are partially viewed against a backdrop of distant hills and mountains which limits the potential for overbearing or domineering effects.</p>		
Cumulative Effects	<p>The cumulative 90° wireframe shows that there is potential visibility of turbines of many existing, permitted and proposed wind farms (Shehy More, Curraglass, Grousemount/Barnastooka, Sillahertane/Coomagearlachy II, Derragh, Midas, Coomagearlachy-Kilgarvan, Knocknamork and Clydaghrone). However, in reality most of these turbines are not discernible on the ground due to distance and topographical screening.</p> <p>In this view the Derragh Wind Farm is located directly behind the Cleanrath wind farm development. There is incongruity in the scale of the two different developments when turbines are seen side by side. visual clutter arises from the Derragh turbines appearing amongst the Cleanrath wind farm development and there is some visual stacking with turbines T6, T7 and T8. However, the position of the Cleanrath wind farm development in front of the Derragh turbines means that the increase in spatial extent of turbines in</p>		

Viewpoint 04 – Carrignaneelagh	
	the view is minimised. Overall cumulative visual effects are deemed to be Moderate .
Sensitivity of Visual Receptor(s)	Medium: Viewers travelling designated scenic route 35 may be receptors of high sensitivity. However, there is a minimal quantity of regular traffic on this local road and few local residents within the vicinity of the viewpoint, therefore, a small quantity of local visual receptors of medium sensitivity. This landscape is not a designated County Cork High Value Landscape and it only has a Moderate sensitivity to wind farm development.
Magnitude of Change	Moderate: The change in the view may involve partial obstruction of existing view or partial change in character and composition of the baseline through the introduction of new elements or removal of existing elements. Likely to occur at locations where the development is partially visible over a moderate or medium extent, and which are not in close proximity to the development. Change may be readily noticeable but not substantially different in scale and character from the surroundings and wider setting.
Significance of Effect	Medium X Moderate = Moderate/Minor = Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends.
Mitigation Factors	<ul style="list-style-type: none"> ➤ The Cleanrath wind farm development and cumulative effects of other windfarms are mitigated by vegetation and topographical screening along the majority of Scenic Route 35. ➤ Distance from the Cleanrath wind farm development mitigates visual effects. ➤ The highly vegetated nature of the intervening landscape between the viewpoint and the Cleanrath wind farm development indicates that significant local screening occurs in this area. ➤ The turbines are viewed within an open and expansive landscape. ➤ The majority of the turbines are partially viewed against a backdrop of distant hills and mountains which limits the potential for overbearing or domineering effects. ➤ The Cleanrath wind farm development is appropriately scaled and absorbed effectively within the landscape.
Residual Effect (incl. mitigating factors)	Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends.

Viewpoint 05 – Inchigeelagh (R584)			
Viewpoint Description and Details	<ul style="list-style-type: none"> ➤ View from the R584 regional road in the townland of Inchigeelagh. ➤ Exit/Entrance to the Settlement of Inchigeelagh. ➤ Designated Cork County Scenic Route 34. ➤ 3.32 km south-east of the nearest turbine. ➤ Grid Reference: E:122156; N:65986 ➤ No. of turbines visible: 5/9 		
LCT and Sensitivity	LCT 15a: Rolling Marginal and Forested Middleground - Moderate.	Visual Receptor(s) and Sensitivity	Designated Scenic Route - High Local Traffic - Medium Residents - Medium
Baseline Description	<p>A relatively open, undulating landscape is seen from the roadside outside of Inchigeelagh. A field of improved agricultural land is the dominant feature of the foreground, while vegetation such as small trees and wild hedgerows are seen in the middle ground along with infrastructure from a sports field to the right of the image. In the background, to the right, higher ground is visible with a stand of coniferous forestry dominating the skyline. The view looks up towards a barren mountain moorland landscape framed by conifers in the centre of the image. Several telegraph poles and goal uprights from a GAA pitch are vertical man-made elements populating the foreground and middle ground of this landscape view.</p> <p>The blade tips of turbines of the neighbouring Derragh windfarm are just visible, although they are almost imperceptible.</p>		
Photomontage Description	<p>The photomontage shows five of the Cleanrath turbines are partially visible in a cluster to the centre of the view, four being obscured fully by the topography and forestry on the skyline. Although this location is relatively close to the turbines it provides a good example of the screening effect of the local topography which is a feature of the site and surrounds.</p> <p>The turbines are seen adjacent to higher ground to the right which creates a sense of visual balance. From this relatively close vantage point the turbines are clearly visible but not dominant, especially in comparison with other vertical landscape elements such as the utility poles seen in the foreground.</p>		
Cumulative Effects	Cumulative visual effects are determined as Imperceptible.		
Sensitivity of Visual Receptor(s)	<p>Medium: The viewpoint is located on County Cork Scenic Route 34 which is a visual receptor of high sensitivity, however, the orientation of the road and valuable views from the route are not directed at the Cleanrath wind farm development. Visual receptors such as local traffic and residents of Inchigeelagh are encompassed by this viewpoint location, however, these viewers will be engaged in activities where the primary focus is not upon the landscape or views. The landscape character of this location is designated as LCT 15a which has a moderate sensitivity to windfarm development.</p>		
Magnitude of Change	<p>Slight: The proposals would be partially visible or visible at sufficient distance to be perceptible and result in a low level of change in the view and its composition and a low degree of contrast. The character of the view may be altered but will remain similar to the baseline existing situation. This change could be short term or of a short duration.</p>		

Viewpoint 05 – Inchigeelagh (R584)	
Significance of Effect	Medium x Slight = Minor = Slight (EPA, 2017) An effect which causes noticeable changes in the character of the environment without affecting its sensitivities
Mitigation Factors	<ul style="list-style-type: none"> ➤ Local topography and forestry obscures fully four of the turbines. ➤ Intermittent screening from roadside hedgerows obscures views of the Cleanrath wind farm development from many views along Scenic Route 34. ➤ Road users will be travelling in a direction perpendicular to the Subject, Development and the focus of their view will not be focussed towards the turbines of the Cleanrath wind farm development. ➤ All visible turbine components are seen above the horizon and do not obstruct or interfere with any views from this perspective.
Residual Effect (incl. mitigating factors)	Slight (EPA, 2017) An effect which causes noticeable changes in the character of the environment without affecting its sensitivities

Viewpoint 06 – Lough Allua			
Viewpoint Description and Details	<ul style="list-style-type: none"> ➤ View from South Lake local road on the southern shore of Lough Allua in the townland of Coornahahilly. ➤ Designated County Cork Scenic Route 32. ➤ 3.6 km south south-west of the nearest turbine. ➤ Grid Reference: E:118964; N:65396. ➤ No. of turbines visible: 9/9 		
LCA and Sensitivity	LCT 15a: Rolling Marginal and Forested Middleground - Moderate.	Visual Receptor(s) and Sensitivity	Designated Scenic Route - High ; Local Traffic - Medium ; Residents - Medium.
Baseline Description	<p>This viewpoint shows a view over Lough Allua from the scenic route. In the foreground, the lake appears as a significant landscape feature of the view, and across the lake an undulating landscape is visible. Along the far lakeshore small fields separated by hedgerows are visible with scattered houses and trees, while to the north a ridge of mountain moorland is seen which is relatively open and rocky.</p> <p>The only other turbines in the same viewshed as the Cleanrath wind farm development are five turbines of the Derragh Wind Farm to the left of the view.</p>		
Photomontage Description	<p>The view shows the turbines of the Cleanrath wind farm development appearing along the ridgeline. While all nine turbines are visible, some are only partially visible due to their siting on the far side of the ridge. The view to the lake and the higher ground behind is not obstructed by the Cleanrath wind farm development.</p> <p>Potential for visual stacking of Turbines T1, T5, T8 and T10 is evident from this perspective.</p>		
Cumulative Effects	<p>The large mountain moorland peak seen between the Derragh Wind Farm and the Cleanrath wind farm development creates clear visual separation. The Cleanrath wind farm development adds to the spatial extent of turbines seen from this viewpoint, however, the turbines from both wind farms are of similar scaling and design, and neatly frame the peak located between them, mitigating the significance of cumulative visual effects. Cumulative visual effects are deemed to be Slight to Moderate.</p>		
Sensitivity of Visual Receptor(s)	<p>Medium: Includes viewers travelling the designated scenic route. Viewers such as residents in medium proximity to the viewpoint; there is limited regular traffic and therefore limited visual receptors along this small local road. The viewpoint is located in a landscape of moderate sensitivity to windfarm development.</p>		
Magnitude of Change	<p>Moderate: The change in the view may involve partial obstruction of existing view or partial change in character and composition of the baseline through the introduction of new elements or removal of existing elements. Likely to occur at locations where the development is partially visible over a moderate or medium extent, and which are not in close proximity to the development. Change may be readily noticeable but not substantially different in scale and character from the surroundings and wider setting.</p>		
Significance of Effect	<p>Medium X Moderate = Moderate/Minor = Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends.</p>		

Viewpoint 06 – Lough Allua	
Mitigation Factors	<ul style="list-style-type: none"> ➤ Open and expansive view of a location designated for wind turbines ➤ All turbines of the Cleanrath wind farm development are only seen above the horizon with no other landscape elements visible as a backdrop, mitigating visual confusion. ➤ The Cleanrath wind farm development does not obscure or obstruct the views over Lough Allua from the Scenic Route. ➤ Road users will be travelling in a direction perpendicular to the Subject, Development and the focus of their view will not be focussed towards the turbines of the Cleanrath wind farm development.
Residual Effect (incl. mitigating factors)	<p>Moderate (EPA, 2017)</p> <p>An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends</p>

Viewpoint 07 – Kealvaugh More			
Viewpoint Description and Details	<ul style="list-style-type: none"> ➤ View from a local road in the townland of Kealvaugh More south of Ballingeary. ➤ County Cork Scenic Route 33. ➤ 5.78 km south-west of the nearest turbine. ➤ Grid Reference: E:115313; N:65369 ➤ No. of turbines visible: 9/9 		
LCA and Sensitivity	LCT 15a: Rolling Marginal and Forested Middleground - Moderate.	Visual Receptor(s) and Sensitivity	Designated Scenic Route - High; Local Traffic - Medium;
Baseline Description	<p>The foreground of this viewpoint looks along County Cork Scenic Route 33. Upland heath slopes are seen to the right of the road, whilst views to the left of the road look across an undulating valley of pastoral agricultural land, woodland, open moorland and coniferous forestry. The background landscape rises to more mountainous terrain. Man-made features such as electricity poles and a telecoms tower occupy the landscape of the foreground, whilst scattered settlements are evident on lower elevations of the middle ground.</p> <p>The Derragh Wind Farm can be seen to the left of the image. Turbines of the existing Bawnmore 2 Wind Farm and permitted Knocknamork Wind Farm are visible in the background of the image at a distance where they are seen as very small and negligible landscape elements.</p>		
Photomontage Description	<p>All nine turbines will be visible from this viewpoint, albeit partially screened by topography and a treeline along the higher ground. The lower towers of Turbines T3, T4, T5 and T8 will be screened by landform and only the blades of Turbine T1 are visible. The turbines are framed by rising topography. Furthermore, other man-made elements, most notably the telecoms tower in the foreground are more or equally dominant features in the view. The turbines appear as a cluster around Derrineanig Hill, the spatial extent of which is not significant in this extensive landscape. The view presented in the photomontage show that the landform is of a scale that has comfortably absorbed the Cleanrath wind farm development without the turbines appearing as dominant or obtrusive features in the landscape. The wind farm does not adversely detract from the scenic amenity of the view available from this road.</p>		
Cumulative Effects	<p>While the Derragh turbines are of a similar scale and design to the Cleanrath wind farm development turbines, there is clear visual separation between the two developments from this location they are a more dominant feature of the landscape than the Cleanrath wind farm development with a greater spatial extent. The existing Bawnmore 2 Wind Farm is visible in the centre of the background of the view. The permitted Knocknamork Wind Farm will be seen on the far horizon to the left. At this distance they are very small and negligible landscape elements. Overall cumulative visual effects are deemed to be Slight to Moderate.</p>		
Sensitivity of Visual Receptor(s)	<p>Medium: Includes viewers travelling the designated scenic route, there is a minimal quantity of regular traffic on this remote road and therefore limited visual receptors. Although the landscape sensitivity designation of this LCT is High, the landscape only has a Moderate sensitivity to wind farm development.</p>		

Viewpoint 07 – Kealvaugh More	
Magnitude of Change	Slight: The change in the view may involve partial obstruction of existing view or partial change in character and composition of the baseline through the introduction of new elements or removal of existing elements. Likely to occur at locations where the development is partially visible over a moderate or medium extent, and which are not in close proximity to the development. Change may be readily noticeable but not substantially different in scale and character from the surroundings and wider setting.
Significance of Effect	Medium X Slight – Minor – Slight (EPA, 2017) An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
Mitigation Factors	<ul style="list-style-type: none"> ➤ From this perspective there is an open and expansive view of a location designated for wind energy developments and the Cleanrath wind farm development is appropriately scaled and absorbed effectively within the landscape. ➤ Visual effects are significantly mitigated by distance from the Cleanrath wind farm development ➤ Other man-made features in the vicinity of this viewpoint such as the meteorological mast, telecommunication poles reduce the perceived scale of the Cleanrath wind farm development from this viewpoint. ➤ Most turbine blade arcs are seen above the horizon, mitigating any visual clutter attributed stacking or blade overlap.
Residual Effect (incl. mitigating factors)	Slight (EPA, 2017) An effect which causes noticeable changes in the character of the environment without affecting its sensitivities

Viewpoint 08 – Gortnaloughra			
Viewpoint Description and Details	<ul style="list-style-type: none"> ➤ View from a local road in the townland of Gortnaloughra. ➤ County Cork Scenic Route 27. ➤ 8.32 km south-west of the nearest turbine. ➤ Grid Reference: E:111366; N:67623 ➤ No. of turbines visible: 6/9 		
LCA and Sensitivity	LCT 15a: Rolling Marginal and Forested Middleground - Moderate.	Visual Receptor(s) and Sensitivity	Designated Scenic Route - High; Local Traffic - Medium;
Baseline Description	The viewpoint location is in close proximity to the scenic landscape of Gougane Barra, looking over a relatively open undulating landscape that is sparsely settled. In the foreground lies an area of peatland bordered by conifers and scrub with hills in the background. Some coniferous vegetation is evident on the higher ground and scattered buildings are visible. Turbines of the Derragh Wind Farm are partially visible to the left of the Cleanrath wind farm development.		
Photomontage Description	Eight turbines of the Cleanrath wind farm development are visible in the photomontage. The turbines that can be seen are partially screened by topography and a treeline along the higher ground, only the upper blade arc of turbine T3 is visible. The turbines are seen as a coherent cluster and appear as relatively small features in the background of this view, framed on either side by rising topography. Gougane Barra is located in the opposite direction to the Cleanrath Wind Farm from this viewpoint location and is therefore not visible in the photomontage. There is adequate spacing between turbines ensuring blades do not overlap.		
Cumulative Effects	Three of the Derragh turbines are visible above hub height and the blades of three turbines will be seen crossing the skyline. No other existing, permitted wind farms are visible in this photomontage. Cumulative effects are greatly mitigated by distance and topographical screening, therefore Overall cumulative visual effects are deemed to be Negligible.		
Sensitivity of Visual Receptor(s)	High: Includes viewers travelling the designated scenic route 27. There is increased sensitivity on this road as it is one of the only roads in and out of the Gougane Barra, which is a County Cork designated High Value Landscape. The Gougane Barra is a popular and valued tourist destination, therefore the access road is a visual receptor of high sensitivity.		
Magnitude of Change	Negligible: Any change would only be barely distinguishable from the status quo 'Baseline' in the surroundings. The composition and character of the view would be substantially unaltered, approximating to little or no change.		
Significance of Effect	High X Negligible = Minor = Slight (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends.		
Mitigation Factors	<ul style="list-style-type: none"> ➤ The Cleanrath wind farm development and cumulative effects of other windfarms are mitigated by vegetation and topographical screening along this scenic route. ➤ The turbines appear as relatively small features in the background of this view, framed on either side by rising topography. ➤ Distance from the Cleanrath wind farm development mitigates visual effects. 		

Viewpoint 08 – Gortnaloughra	
	<p>➤ The Cleanrath wind farm development is appropriately scaled and absorbed effectively within the landscape.</p>
Residual Effect (incl. mitigating factors)	<p>Imperceptible (EPA, 2017) An effect capable of measurement but without significant consequences</p>

Viewpoint 09 – Keamcorravooly			
Viewpoint Description and Details	<ul style="list-style-type: none"> ➤ View from a local road in townland of Keamcorravooly. ➤ County Cork Scenic Route 27. ➤ 5.72 km south west of the nearest turbine. ➤ Grid Reference: E:113972; N:6800 ➤ No. of turbines visible: 9/9 		
LCA and Sensitivity	LCT 15a: Rolling Marginal and Forested Middleground - Moderate.	Visual Receptor(s) and Sensitivity	Designated Scenic Route - High; Local Residents - Medium; Local Traffic - Low.
Baseline Description	<p>The viewpoint is located on the L-7406-16 local road east of Gougane Barra, which forms part of Scenic Route 27. The view extends across a small valley with an undulating landscape composed of agricultural fields, scrub, woodland clusters and scattered dwellings. In the background, views extend to higher elevations across the valley where a mountain moorland alongside coniferous plantation is visible.</p> <p>The Derragh turbines can be seen on the ridgeline to the left.</p>		
Photomontage Description	<p>The Cleanrath wind farm development is located along the skyline in the centre of the image. In the absence of any landcover, the full extent of turbines T6, T7, T9 and T10 are visible, the tower of T8 is partially screened. The high elevation of Derrineanig (304 OD) where the Cleanrath wind farm development is sited screens most of the other turbines from view. The nacelle and blades of turbines T1 and T5 are visible just above the horizon, while only the blades of turbines T3 and T4 will be seen above the ridgeline. The Cleanrath wind farm development populates the background of the photomontage without obstructing any views. At a distance of approximately 5.72 kilometres, the Cleanrath wind farm development does not appear as a dominant feature in the landscape and the rolling, open nature of the landscape is of a scale that can comfortably accommodate the Cleanrath wind farm development.</p>		
Cumulative Effects	<p>The Derragh Wind Farm is located in closer proximity to the viewpoint than the Cleanrath wind farm development, as such, all six of the Derragh turbines are clearly visible across the skyline to the left of the image. No other wind farms are visible in this photomontage image.</p> <p>The scale and siting of both the Derragh Wind Farm and the Cleanrath wind farm development are similar in their scale, spacing and location on high elevated ridges. This design and siting mitigates cumulative visual effects and helps the landscape to absorb both developments without inducing high cumulative effects. The addition of the Cleanrath wind farm development turbines extends the spatial extent of turbines in the view, however, they can be identified as two separate developments as they are separated by an intervening valley. Overall cumulative visual effects are deemed to be Slight.</p>		
Sensitivity of Visual Receptor(s)	<p>Medium: Includes viewers travelling the designated scenic route 27 which is of high sensitivity. There is a minimal quantity of regular traffic on this local road and scattered settlements within the vicinity of the viewpoint, therefore, a small quantity of local visual receptors of low/medium sensitivity. This viewpoint is located in LCT 15a which has a moderate sensitivity to wind farm development.</p>		

Viewpoint 09 – Keamcorravooly	
Magnitude of Change	Moderate: The change in the view may involve partial obstruction of existing view or partial change in character and composition of the baseline through the introduction of new elements or removal of existing elements. Likely to occur at locations where the development is partially visible over a moderate or medium extent, and which are not in close proximity to the development. Change may be readily noticeable but not substantially different in scale and character from the surroundings and wider setting.
Significance of Effect	Medium X Moderate = Moderate/Minor = Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends.
Mitigation Factors	<ul style="list-style-type: none"> ➤ Open and expansive view of a location designated for wind turbines. ➤ All turbines of the Cleanrath wind farm development and other wind farms in the area are only seen above the horizon with no other landscape elements visible as a backdrop, mitigating against visual confusion. ➤ The Cleanrath wind farm development does not obscure or obstruct the views across the valley from the Scenic Route. ➤ Localised variations in topography and roadside vegetation (trees, hedgerows, scrub) provide intermittent screening of the Cleanrath wind farm development from many areas along this scenic route.
Residual Effect (incl. mitigating factors)	Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends.

Viewpoint 10- Derryfineen			
Viewpoint Description and Details	<ul style="list-style-type: none"> ➤ View from a local road in the townland of Derryfineen. ➤ County Cork Scenic Route 26. ➤ 2.88 km northwest of the nearest turbine. ➤ Grid Reference: E:117987; N:72098 ➤ No. of turbines visible: 9/9 		
LCA and Sensitivity	12a - Rolling Marginal Middleground - Moderate	Visual Receptor(s) and Sensitivity	Designated Scenic Route - High ; Residents - Medium ; Local Traffic - Low .
Baseline Description	<p>The immediate foreground of this viewpoint shows a grassy field bordered by mixed woodland, beyond which an undulating landscape extends comprising of mixed woodland and hedgerows with a small cluster of small pastoral fields seen to the right of the image. The intermediate view is dominated by a hill to the right of the image which has higher elevations covered by coniferous forestry. In the centre of the image, a patchwork of fields and several residential dwellings are interspersed on the low-lying ground at middle distance views. As the landscape extends across the valley towards the background and the Cleanrath wind farm development, the terrain rises to a landscape of mountain moorland character.</p> <p>To the right of the central upland there is a distant view to a ridge where five of the Carrigarierk turbines (under construction) will be visible. Although the existing Garranereagh Wind Farm is theoretically visible on a distant ridgeline to the left it cannot be seen with the naked eye.</p>		
Photomontage Description	<p>All turbines of the Cleanrath wind farm development are visible in this photomontage. Derrineanig Hill screens most of turbine T10 save for the blades, the tower and lower blade arc of turbine T9 is also screened by this topography. Turbines T6 and T7 are the closest turbines to this viewpoint location (approximately 2.9 km) and are consequently seen as the most prominent features of the Cleanrath wind farm development. There is no visual stacking from this perspective and strategic siting of the Cleanrath wind farm development in the mountain moorland site enables it to be absorbed effectively within the landscape.</p>		
Cumulative Effects	<p>The cumulative photomontage shows that four turbines of the Carrigarierk Wind Farm (currently under construction) will be seen on the distant horizon to the right of the Cleanrath wind farm development. There is no visual overlap with the Cleanrath wind farm development and the obvious differences in scale and location clearly defines them as separate developments.</p> <p>The cumulative wireframe indicates that the existing Garranereagh Wind Farm is visible from this viewpoint location. At this distance they will not be discernible with the naked eye and any visual cumulative effects are negligible.</p> <p>Overall cumulative visual effects are deemed to be Negligible.</p>		
Sensitivity of Visual Receptor(s)	<p>Medium: Includes viewers travelling the designated scenic route. Viewers such as residents in medium proximity to the viewpoint; there is minimal regular traffic and therefore limited visual receptors along this local road. This landscape is not a designated County Cork High Value Landscape and it only has a Moderate sensitivity to wind farm development.</p>		

Viewpoint 10- Derryfineen	
Magnitude of Change	Moderate: The change in the view may involve partial obstruction of existing view or partial change in character and composition of the baseline through the introduction of new elements or removal of existing elements. Likely to occur at locations where the development is partially visible over a moderate or medium extent, and which are not in close proximity to the development. Change may be readily noticeable but not substantially different in scale and character from the surroundings and wider setting.
Significance of Effect	Medium X Moderate = Moderate/Minor = Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends.
Mitigation Factors	<ul style="list-style-type: none"> ➤ Open and expansive view of a location designated for wind turbines. ➤ The Cleanrath wind farm development is suitably sited to avoid visual clutter. ➤ The Cleanrath wind farm development is appropriately scaled and absorbed effectively within the landscape. ➤ Road users will be travelling in a direction perpendicular to the Subject, Development and the focus of their view will not be focussed towards the turbines of the Cleanrath wind farm development.
Residual Effect (incl. mitigating factors)	Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends.

Viewpoint 11 – N22 Ballyvourney			
Viewpoint Description and Details	<ul style="list-style-type: none"> ➤ View from the N22 National Primary Road between Ballyvourney and Ballymakeery in the townland of Flats. ➤ County Cork Scenic Route 23. ➤ 6.89 km north of the nearest turbine. ➤ Grid Reference: E:120373; N:76937 ➤ No. of turbines visible: 0/9 		
LCA and Sensitivity	LCT 12a - Rolling Marginal Middleground - Moderate	Visual Receptor(s) and Sensitivity	Designated Scenic Route - High ; N22 National Primary Road - High ; Residents of Ballyvourney - Medium
Baseline Description	The existing view, on the outskirts of Ballyvourney, looks across an open agricultural field to the Sullane River lined by mature trees. Residential houses are seen to the left and in the background a ridge of higher ground covered in mature trees is visible.		
Photomontage Description	None of the Cleanrath wind farm development turbines will be visible from this location. The ZTV map presented in Figure 13-1 shows that due to the elevated topography of the intervening landscape there will also be no visibility for an approximate nine-kilometre stretch of the N22, from south-east of Ballymakeery to north-west of Ballyvourney, north of the Cleanrath wind farm development.		
Cumulative Effects	Cumulative visual effects do not arise from this viewpoint.		
Sensitivity of Visual Receptor(s)	High: The large quantity of visual receptors travelling the designated scenic route 23 and the N22 primary transportation route between County Cork (Macroom) and County Kerry (Killarney) are receptors of high sensitivity. Residents of Ballyvourney are in close proximity to this viewpoint and are receptors of moderate sensitivity. This landscape is not a designated County Cork High Value Landscape and it only has a Moderate sensitivity to wind farm development.		
Magnitude of Change	No change		
Significance of Effect	No Impact		
Mitigation Factors	➤ No visibility of the Cleanrath wind farm development from this location		
Residual Effect (incl. mitigating factors)	No Impact		

PHOTOMONTAGE ASSESSMENT TABLES

**APPENDIX 13-3: CLEANRATH
191223-A**