

APPENDIX REPORT



Moray Wind Energy Landscape Capacity Study

Final Appendix Report – Detailed sensitivity assessments

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Sensitivity assessment of landscape character types

Introduction

Sensitivity assessments have been undertaken for each character type and any subtypes defined as explained in Section 3 of the report. The sensitivity assessment considers the sensitivity of each character type to four different wind farm/turbine typologies based on the height of turbines.

An introduction to each character type is set out in the sensitivity assessments that follow. This describes where changes have been made to the boundaries or classification of character types set out in the Moray and Nairn Landscape Assessment and outlines the sub-divisions defined within original character types. Operational and consented wind farm developments, whether located within the landscape type or in the surrounding area (and clearly visible from the character type being assessed) are briefly listed.

This Appendix Report contains the detailed sensitivity assessments undertaken for each landscape character type. The sensitivity scores outlined in the summary of sensitivity are made on the basis of a five point scale; High, High-medium, Medium, Medium-low and Low. These assessments consider landscape and visual sensitivity against a number of key criteria including any cumulative effects associated with existing and consented wind energy developments. Further detail on methodology is contained in section 2 and in Annex C of the Main Study Report.

Potential Cumulative issues and key constraints and opportunities are set out for each landscape character type and the sensitivity assessment concludes with guidance on the siting of wind farm/turbine development. A detailed map of each landscape character type/sub-type and photographs are also provided in the following sensitivity assessments.

Character Type 1-3: Coastal Margin

Introduction

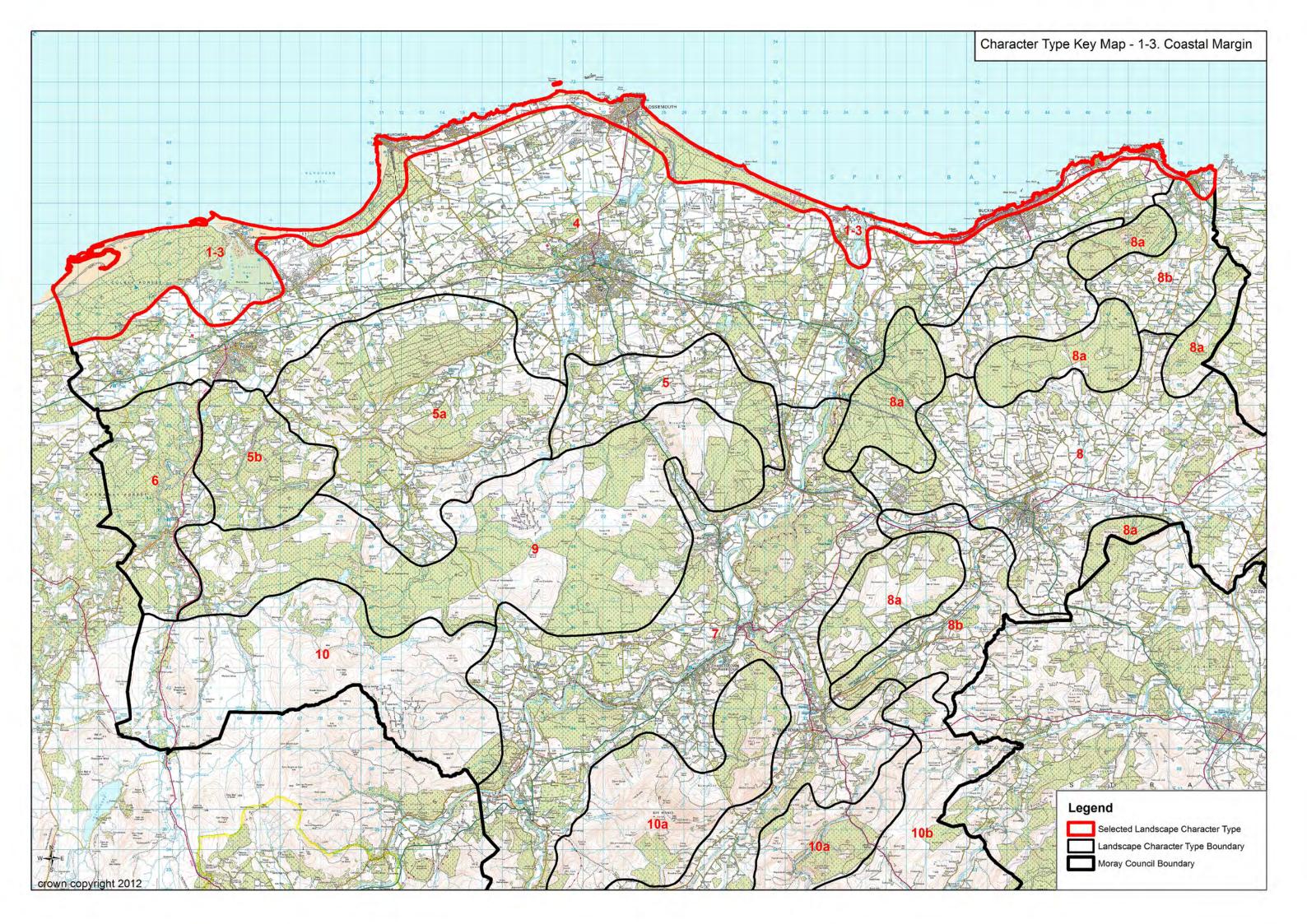
The Coastal Margin character type combines the 'Soft Coastal Shore' (1), 'Hard Coastal Shore' (2) and 'Coastal Forest' (3) character types defined in the Moray and Nairn landscape assessment.

Existing/consented wind farm development

No operational wind turbines were noted in this character type.

Four operational wind turbines of 46m height are located within the adjacent Coastal Farmlands (4) character type in the Findhorn area and are particularly visible from the rocky headlands along the Coastal Margin (1-3).

Views to operational wind farms located within the distant upland character types are limited from many parts of the coast due to the screening provided by landform and extensive forest. More open views are possible to the Rothes wind farm and its consented extension from Findhorn Bay and intermittently from the Lossiemouth area. The consented Berry Burn wind farm will also be visible from these areas. Both these wind farms will be seen at distances of over 18km.



Character Type 1-3: Coastal Margin – Sensitivity assessment for large and medium typologies

Topic	Summary description	Assessment of large typology	Sensitivity	Assessment of medium	Sensitivity
		(80m-130m)	rating	typology (50m-80m)	rating
Landscape context	This character type forms a very narrow coastal margin largely defined by the low cliff of a raised beach in the east and a distinct ridge between Lossiemouth and Burghead. The character type is wider to the west where it includes the coastal forests, the most extensive of these being Culbin. This landscape lies adjacent to the Coastal Farmland (4) although inter-visibility between the two is often restricted by landform and forestry. There is greater inter-visibility of these two character types east of the River Spey due to the absence of screening features.	The narrowness of this character type increases sensitivity in terms of effects on adjoining landscapes. This typology is likely to have a significant impact on the Coastal Farmland (4), which although extensive and relatively simple in terms of its landform and land cover, is well settled and very open. Turbines of this size could detract from the landmark hill of the Bin of Cullen and the setting to Cullen House, within the Coastal Farmland (4) if sited in the eastern part of this character type.	High- medium	The narrowness of this character type increases sensitivity in terms of effects on adjoining landscapes. This typology is likely to have a significant impact on the Coastal Farmland (4), which although extensive and relatively simple in terms of its landform and land cover, is well settled and very open. Turbines of this size could detract from the landmark hill of the Bin of Cullen and the setting to Cullen House, within the Coastal Farmland (4) if sited in the eastern part of this character type.	High- medium
Scale and openness	The Moray Firth gives a sense of expansiveness to the overall seascape. Long even beaches are more open although more intricate sections of rocky indented coastline, narrow raised beaches and extensive dune systems also occur and these areas have a smaller scale. Dispersed buildings are rare although a regular pattern of small settlements is a characteristic of this coast. Forests and enclosed farmland also provide scale references.	Although this typology could relate to the scale of more open, long even sections of coastline and the wider Moray Firth, areas of more complex indented coastline, the low relief of the shoreline, raised beaches and low cliffs would be highly sensitive in terms of comparisons of scale to turbines of this size. Small settlements and other features would also be dwarfed by this typology.	High- medium	Although this typology could relate to the scale of more open, long even sections of coastline and the wider Moray Firth, areas of more complex indented coastline, the low relief of the shoreline, raised beaches and low cliffs would be highly sensitive in terms of comparisons of scale to turbines of this size. Small settlements and other features would also be dwarfed by this typology.	High- medium

Landscape pattern	A diverse and often complex landform with long sandy and banked stony beaches backed by complex sand dunes, spits and other transient geomorphological features in the Culbin, Findhorn and Spey estuary area. The coast is more indented and rocky to the east and between Lossiemouth and Burghead, featuring small coves, promontories and occasional craggy islets. A raised beach platform and associated low cliff occurs between Buckie and Cullen. Cultivated fields, often enclosed by stone walls, slope gently down to the low cliffs of raised beaches in the east. Gorsey scrub colonises cliff tops and small knolls on seaward facing slopes and rocky knolls. Extensive pine forests planted on dunes and poorer soils and gravels back the coast in places and are particularly extensive to the west. Many of these forests are managed for their recreation and conservation value and are often diverse. Mudflats and saltmarsh form complex patterns within the tidal Findhorn Bay and Spey estuary. Golf courses are occasional features close to the coastal edge.	The complex form of dune systems and more intricate coastal features would be highly sensitive to this typology. Although turbines of this size would relate better to the more simple stretches of coast and the gently sloping immediate hinterland present in some areas, they would detract from nearby more complex landform appreciated in long views along the coast. The abrupt edges of cliff tops, the low, narrow ridge between Lossiemouth and Burghead and skylines overlooking the coast would be particularly sensitive to this typology. This typology would detract from the often diverse vegetation pattern which is closely associated with the landform of the Coastal Margin. More uniform forestry and less strongly enclosed farmland would be less sensitive.	High- medium	The complex form of dune systems and more intricate coastal features would be highly sensitive to this typology. Although turbines of this size would relate better to the more simple stretches of coast and the gently sloping immediate hinterland present in some areas, they would detract from nearby more complex landform appreciated in long views along the coast. The abrupt edges of cliff tops, the low, narrow ridge between Lossiemouth and Burghead and skylines overlooking the coast would be particularly sensitive to this typology. This typology would detract from the often diverse vegetation pattern which is closely associated with the landform of the Coastal Margin. More uniform forestry and less strongly enclosed farmland would be less sensitive.	High- medium
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Built	There is a strong identity to the	This typology would dominate the	High	This typology would dominate the	High
environment	settlements which are regularly spaced	setting of architecturally distinctive		setting of architecturally distinctive	
	along the coast. Many are of historic	settlements if sited nearby and/or on		settlements if sited nearby and/or	
	and architectural interest.	containing skylines. Turbines of this		on containing skylines. Turbines of	
	Lossiemouth and Burghead are	size, and particularly multiple		this size, and particularly multiple	
	distinctively sited on promontories	turbines, could disrupt the regular		turbines, could disrupt the regular	
	above sheltered harbours while the	pattern of largely compact		pattern of largely compact	
	planned fishing ports to the east are	settlements, often clearly associated		settlements, often clearly	
	tucked below cliffs on narrow raised	with river mouths or sheltered		associated with river mouths or	
	beaches.	natural harbours set along the coast		sheltered natural harbours set	
	Parts of the immediate hinterland are	by filling gaps of open land between		along the coast by filling gaps of	
	more developed, for example between	them. The lighthouse west of		open land between. The lighthouse	
	Lossiemouth and Burghead and east	Lossiemouth would be sensitive to		west of Lossiemouth would be	
	of the Spey with golf courses and	turbines sited nearby.		sensitive to turbines sited nearby.	
	caravan parks. The lighthouse west of				
	Lossiemouth forms a landmark feature.				
Perceptual	The coastal edge has distinctive	Turbines of this scale could intrude	High-	Turbines of this scale could intrude	High-
qualities	natural qualities and a sense of	on the sense of seclusion and	medium	on the sense of seclusion and	medium
	remoteness can also be experienced	naturalness experienced along parts		naturalness experienced along	
	away from roads and settlement,	of the coastline.		parts of the coastline.	
\ <i>C</i> 1	where the hinterland is less visible.	The state of the s		This is a set of the control of the	
Visual	The Coastal Margin is well settled and	This size of turbine would be highly	High	This size of turbine would be highly	High
amenity	the forests and coast are highly valued	visible from roads, settlement and		visible from roads, settlement and	
	for recreational use.	beaches within this character type		beaches within this character type	
	There are open views across the	where it would form a dominant feature.		where it would form a dominant feature.	
	Moray Firth to the distant Sutherland			Turbines of this size would also be	
	coast and hills. Views between the	Turbines of this size would also be			
	Moray coast and hinterland, including	prominent in views from the Coastal		prominent in views from the Coastal	
	the adjacent Coastal Farmland (4), are	Farmland (4) and from the north-		Farmland (4) and from the north-	
	screened by landform and forestry in	facing settled slopes of the 'Rolling Farmlands and Forest with Valleys'		facing settled slopes of the 'Rolling Farmlands and Forest with Valleys'	
	places although inter-visibility along	(5a) and the 'Coastal Farmland with		(5a) and the 'Coastal Farmland with	
	the coast and the wider Moray	rolling hills' (4a).		` ,	
	landscape is increased along more			rolling hills' (4a).	
	open, long and even sections of coast.				
	Binn Hill is prominent in these views.				

Cumulative	The small group of turbines at	Cumulative effects with existing wind	Medium-low	Cumulative effects with existing	Medium-low
Cumulative effects	The small group of turbines at Findhorn are visible from the western part of this character type. The operational Rothes and Hill of Towie wind farms are visible north and east of Elgin seen on the skyline of the distant uplands of the 'Upland Moorland and Forestry' (9) and 'Broad Forested Hills within Upland Farmland' (8a) but at distances of over 18km. The consented extension to the Rothes wind farm will extend the numbers of turbines visible on the skyline in these views. Boyndie wind farm in neighbouring Aberdeenshire is visible from the A98 along the coast.	farms sited within the upland landscapes to the south are unlikely to be significant due to the distances involved, the intermittent nature of open views to the hinterland and the extensiveness of views which lessens visual impact. This size of turbine sited in the western part of this character type would have cumulative effects with the smaller Findhorn turbines but also with other buildings and infrastructure associated with the RAF Kinloss. Cumulative effects on views from key coastal routes may occur with wind farm developments sited in	Medium-low	wind farms sited within the upland landscapes to the south are unlikely to be significant due to the distances involved, the intermittent nature of open views to the hinterland and the extensiveness of views which lessens visual impact. This size of turbine sited in the western part of this character type would have cumulative effects with the smaller Findhorn turbines but also with other buildings and infrastructure associated with the RAF Kinloss. Cumulative effects on views from key coastal routes may occur with wind farm developments sited in	Medium-low
	skyline in these views. Boyndie wind farm in neighbouring Aberdeenshire is visible from the A98	RAF Kinloss. Cumulative effects on views from key coastal routes may occur with wind		RAF Kinloss. Cumulative effects on views from key coastal routes may occur with	

Character Type 1-3: Coastal Margin – Sensitivity assessment for small-medium and small typologies

Topic	Summary description	Assessment of small-medium	Sensitivity	Assessment of small typology	Sensitivity
		typology (35m-50m)	rating	(20m-35m)	rating
Landscape context	This character type forms a very narrow coastal margin largely defined by the low cliff of a raised beach in the east and a distinct ridge between Lossiemouth and Burghead. The character type is wider to the west where it includes the coastal forests, the most extensive of these being Culbin. This landscape lies adjacent to the Coastal Farmland (4) although inter-visibility between the two is often restricted by landform and forestry. There is greater inter-visibility of these two character types east of the River Spey due to the absence of screening features.	This typology could be sited within broader sections of the Coastal Margin (1-3) to minimise effects on the 'Coastal Farmland' (4) although these areas are forested and other sensitivities would therefore come into play. Turbines of this size could detract from the landmark Bin of Cullen and the setting to Cullen House if sited nearby or in key views.	Medium	Smaller turbines would have less of an effect on the adjoining 'Coastal Farmland' (4) character type. There are increased opportunities to site turbines towards the lower height band of this typology to minimise effects on adjoining sensitive landmark hills and policies.	Medium-low
Scale and openness	The Moray Firth gives a sense of expansiveness to the overall seascape. Long even beaches are more open although more intricate sections of rocky indented coastline, narrow raised beaches and extensive dune systems also occur and these areas have a smaller scale. Dispersed buildings are rare although a regular pattern of small settlements is a characteristic of this coast. Forests and enclosed farmland also provide scale references.	Turbines of this size could relate to the scale of more open, long even sections of coastline and would have less of a dominant effect on more sensitive areas provided turbines were located well away from the low relief of the more complex shoreline features, raised beaches and low cliffs. Small settlements and other features would also be dwarfed by this typology.	High- medium	Sensitivity would be reduced in terms of scale to this typology because of greater opportunities to site these smaller turbines to avoid dominating settlement and smaller scale coastal features.	Medium
Landform	A diverse and often complex landform with long sandy and banked stony	The complex form of dune systems and more intricate coastal features	High- medium	The complex form of dune systems and more intricate coastal features	High- medium

	beaches backed by complex sand dunes, spits and other transient geomorphological features in the Culbin, Findhorn and Spey estuary area. The coast is more indented and rocky to the east and between Lossiemouth and Burghead, featuring small coves, promontories and occasional craggy islets. A raised beach platform and associated low cliff occurs between Buckie and Cullen.	would be sensitive to this typology although this typology could relate better to simple sections of even coastline and more gently sloping land. The abrupt edges of cliff tops, the low, narrow ridge between Lossiemouth and Burghead and skylines overlooking the coast would be particularly sensitive.		including estuaries and basins would be sensitive even to this small typology although there are increased opportunities to relate turbines of this size to more even sections of coastline and more gently undulating sloping land without detracting from adjacent more complex areas of landform. The abrupt edges of cliff tops, the low, narrow ridge between Lossiemouth and Burghead and skylines overlooking the coast would be particularly sensitive.	
Landscape pattern	Cultivated fields, often enclosed by stone walls, slope gently down to the low cliffs of raised beaches in the east. Gorsey scrub colonises cliff tops and small knolls on seaward facing slopes and rocky knolls. Extensive pine forests planted on dunes and poorer soils and gravels back the coast in places and are particularly extensive to the west. Many of these forests are managed for their recreation and conservation value and are often diverse. Mudflats and saltmarsh form complex patterns within the tidal Findhorn Bay and Spey estuary. Golf courses are occasional features close to the coastal edge.	This typology would detract from the often diverse vegetation pattern which is closely associated with the landform of the Coastal Margin. More uniform forestry and open farmland would be less sensitive.	Medium	There is increased scope to locate this typology to avoid impact on more diverse vegetation pattern.	Medium-low
Built environment	There is a strong identity to the settlements which are regularly spaced along the coast. Many are of historic and architectural interest.	This typology would dominate the setting of architecturally distinctive settlements if sited nearby and/or on containing skylines. Turbines of this	High	This typology could dominate the setting of architecturally distinctive settlements if sited nearby and/or on containing skylines.	High- medium

	Lossiemouth and Burghead are distinctively sited on promontories above sheltered harbours while the planned fishing ports to the east are tucked below cliffs on narrow raised beaches. Parts of the immediate hinterland are more developed, for example between Lossiemouth and Burghead and east of the Spey with golf courses and caravan parks. The lighthouse west of Lossiemouth forms a landmark feature.	size, and particularly multiple turbines, could disrupt the regular pattern of largely compact settlements, often clearly associated with river mouths or sheltered natural harbours set along the coast by filling gaps of open land between them. The lighthouse west of Lossiemouth would be sensitive to turbines sited nearby.		Turbines of this size, and particularly multiple turbines, could disrupt the regular pattern of largely compact settlements, often clearly associated with river mouths or sheltered natural harbours set along the coast by filling gaps of open land between them. The lighthouse west of Lossiemouth would be sensitive to turbines sited nearby.	
Perceptual qualities	The coastal edge has distinctive natural qualities and a sense of remoteness can also be experienced away from roads and settlement, where the hinterland is less visible.	Turbines of this scale could intrude on the sense of seclusion and naturalness experienced along parts of the coastline.	High- medium	Turbines of this size could intrude on the sense of seclusion and naturalness experienced along parts of the coastline although there is increased scope for smaller turbines to be set back from the more sensitive coastal edge and thus minimise impacts on perceptual qualities.	Medium
Visual amenity	The Coastal Margin is well settled and the forests and coast are highly valued for recreational use. There are open views across the Moray Firth to the distant Sutherland coast and hills. Views between the Moray coast and hinterland, including the adjacent Coastal Farmland (4), are screened by landform and forestry in places although inter-visibility along the coast and the wider Moray landscape is increased along more open, long and even sections of coast.	This typology would be intrusive from roads, settlements and areas used for recreation, particularly if sited on the edge of beaches, between the coast and the A942 or sited on ridge tops and within narrow raised beaches and on the abrupt edge of cliffs. This size of turbine would be highly visible from roads, settlement and beaches within the Coastal Margin. Turbines of this size could also be prominent in views from the Coastal Farmland (4) and from the north-facing settled slopes of the	High	Even turbines of this size would be intrusive from roads, settlements and areas used for recreation, particularly if sited on the edge of beaches, between the coast and the A942 or sited on ridge tops and within narrow raised beaches and on the abrupt edge of cliffs. This typology would, however, be less likely to be prominent in views from the Coastal Farmland (4) and from the north-facing settled slopes of the 'Rolling Farmlands and Forest with Valleys' (5a) and the 'Coastal	High- medium

	Binn Hill is prominent in these views.	'Rolling Farmlands and Forest with Valleys' (5a) and the 'Coastal Farmland with rolling hills' (4a).		Farmland with rolling hills' (4a).	
Cumulative effects	The small group of turbines at Findhorn are visible from the western part of this character type. The operational Rothes and Hill of Towie wind farms are visible north and east of Elgin seen on the skyline of the distant uplands of the 'Upland Moorland and Forestry' (9) and 'Broad Forested Hills within Upland Farmland' (8a) but at distances of over 18km. The consented extension to the Rothes wind farm will extend the numbers of turbines visible on the skyline in these views.	Cumulative issues with existing wind farms sited within the upland landscapes to the south would not be significant due to the distances involved, the very intermittent nature of open views to the hinterland and the extensiveness of views which lessens their visual impact. This size of turbine sited in the western part of this character type would be more compatible in size with the existing Findhorn turbines but could increase the clutter of built infrastructure in the RAF Kinloss area. Sequential effects on views from key coastal routes may occur with wind farm developments sited in Aberdeenshire.	Low	Cumulative issues with existing wind farms sited within the upland landscapes to the south would not be significant due to the distances involved, the very intermittent nature of open views to the hinterland and the extensiveness of views which lessens their visual impact. This size of turbine would be smaller than the operational Findhorn turbines and could result in cumulative effects if sited closeby. They could also exacerbate the clutter of built infrastructure in the RAF Kinloss area. Turbines of this size would be unlikely to have significant cumulative effects with coastal operational developments in Aberdeenshire.	Low

Character Type 1-3: Coastal Margin

Summary of capacity

This character type generally comprises a narrow coastal band, widening to the west where it includes the coastal pine forests of Culbin and Lossie. The coast has a complex and dynamic character in the west with sand bars, extensive dune systems, basins and marshy estuaries. A small scale rocky coastal edge of coves and promontories is interspersed east of Burghead with longer even stretches of beach while to the east a narrow raised beach is strongly contained by low sandstone cliffs. This character type features a distinctive pattern of small historically interesting planned settlements including Cullen, Findochty, Burghead and Lossiemouth (which occupy raised promontories visible over an extensive area) and Findhorn.

The perceived naturalness and diversity of the coast, the setting it provides to distinctive coastal settlements and the well-settled and popularity of the coast for tourism and recreational use, present key constraints to wind turbine development. There would be a *High* sensitivity to the large typology (80-130m), the medium typology (50-80m) and the small-medium typology (turbines 35-50m). Sensitivity for the small (20-35m) typology would be *High-medium*.

Potential cumulative issues

Operational and consented wind farm development sited within the upland character types does not have a significant effect on character or views from the Coastal Margin (1-3). The existing group of 4 turbines at Findhorn, located close to the Coastal Margin, has a localised effect on coastal character and on views.

Key cumulative issues that may arise within the Coastal Margin (1-3) are likely to include:

- Multiple turbines sited within both the Coastal Margin (1-3) and the Coastal Farmland (4) character types which would be inter-visible in these generally very open landscapes and would be widely seen from settlements, coastal roads and beaches, forming dominant features if repeated across the character type.
- Variations in the type and size of single and small groups of small turbines
 proposed within the landscape type and also cumulative effects with masts
 and other tall infrastructure sited close to the coast which could affect the
 inherent openness and perceived naturalness of this landscape.
- Sequential visual impacts experienced when travelling through this landscape particularly when travelling along the coast.

Constraints

- The narrowness of the Coastal Margin in places which limits scope for multiple and larger typologies to be physically accommodated and would also result in effects on the wider landscape context of the adjacent Coastal Farmland (4).
- The small scale of more complex indented rocky coastline and narrow raised beaches contained by low cliffs.

- The rich diversity of coastal features including raised beaches, rocky coves and promontories, extensive dune systems, sand bars and spits, basins and estuaries.
- The relatively unmodified coastal edge which, although well-used for recreation, has a strong sense of naturalness and can seem secluded away from settlement and especially when backed by the coastal forests.
- A regular pattern of historic settlements including many architecturally interesting planned fishing ports and the prominently sited settlements of Lossiemouth and Burghead.
- The well settled nature of this landscape and the attraction of the coast for recreation increasing sensitivity to turbines which would be seen in views from beaches, forests, roads and settlements.
- Views from the open hinterland of the Coastal Farmland (4) but also from the
 more distant north-facing settled hill slopes of the 'Rolling Farmland and
 Forest with Valleys' (5a) and the 'Coastal Farmlands with Rolling Hills' (4a)
 where larger turbines would be particularly prominent and could intrude on
 views to the Moray Firth.
- The proximity of the landmark hill of the Bin of Cullen and the policies of Cullen House in the east where turbines could detract on the setting of these features.

Opportunities

• There are no opportunities for turbines above 20m high in this landscape.

Guidance on development

No scope has been identified for turbines over 20m high in this landscape.

Small turbines below 20m high could be accommodate but should be sited where they can be clearly associated with existing built development to minimise visual clutter in this highly sensitive coastal landscape. They should avoid coastal areas with perceived qualities of wildness, including some of the coastal forests, and be sited away from more complex small scale or diverse coastal features. Turbines should not be sited on ridge tops, promontories and abrupt cliff edges above raised beaches which often contain and provide the immediate setting to historic settlements. Special care is needed to ensure that only well-designed turbines are used in this particularly sensitive landscape with limits on the range of designs used in order to minimise cumulative landscape and visual effects. There is limited scope for multiple developments in this landscape character area.

Detailed siting and design should accord with the guidance set out in Section 5 of the main study report.



A strong sense of naturalness and seclusion can be experienced on the coast away from settlement and especially when backed by the coastal forests.



Indented rocky coastlines are narrow and often strongly contained by the cliffs of raised beaches.



The setting to the historic settlements which are regularly sited along the Coastal Margin would be sensitive to intrusion by wind turbines.



The well settled nature of this landscape and the attraction of the coast for recreation increases visual sensitivity

Character Type 1-3: Coastal Margin

Character Type 4: Coastal Farmland

Introduction

The Coastal Farmland (4) landscape character type forms a low-lying plain extending east/west across Moray and backing the 'Coastal Margin' (1-3) which lies to the north.

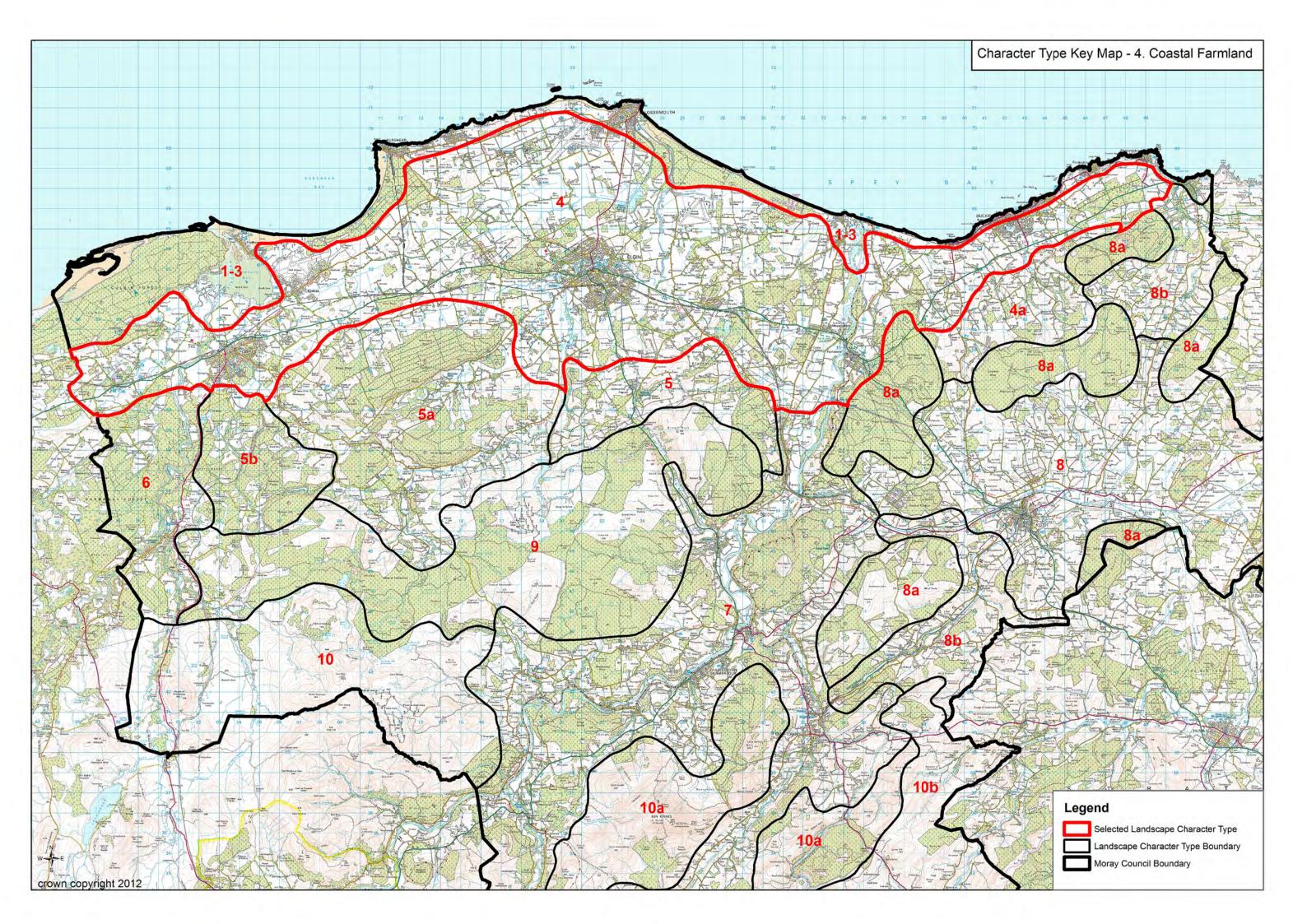
A single sub-division of this character type has been defined in the east where the landscape forms small scale rolling hill fringes to the broad forested plateau of Aultmore and contrasts with the more open and expansive 'Coastal Farmland' (4). This landscape straddles both the 'Coastal Farmland' (4) and 'Upland Farmland' (8) defined in the Moray and Nairn Landscape Assessment and the boundaries of both these character types have been redrawn to create this new landscape sub-type which has been named 'Coastal Farmland with Rolling Hills' (4a).

The sensitivity assessment that follows considers the Coastal Farmland (4) character type.

Existing/consented wind farm development

Four operational wind turbines of 46m height are located within this character type at the Findhorn Foundation.

The operational Rothes wind farm, located in the adjacent 'Upland Moorland and Forest' (9) character type, is visible from parts of the 'Coastal Farmland' (4). The Hill of Towie windfarm, situated in the 'Broad Forested Hills within Upland Farmland' (8a), is also visible in distant views near the coast between Elgin and the Spey valley.



Character Type 4: Coastal Farmland – Sensitivity assessment for large and medium typologies

Topic	Summary description	Assessment of large typology	Sensitivity	Assessment of medium	Sensitivity
		(80m-130m)	rating	typology (50m-80m)	rating
Landscape context	This character type is geographically extensive apart from at its eastern end where it narrows between the coast and the northern edge of Broad Forested Hills within Upland Farmland (8a) and Coastal Farmland with Rolling Hills (4a). A low but distinct ridge forms a boundary between this character type and the Coastal Margin (1-3) between Lossiemouth and Burghead and this, together with the coastal forests planted on more low-lying areas, restricts close views inland to this character type from the coast. There is greater inter-visibility between these two character types east of the Spey due to the absence of screening features. The smaller scale landscapes of the 'Coastal Farmland with Rolling Hills' (4a) and the 'Rolling Farmlands and Forest' (5) and the prominent ridge of Heldon Hill within the 'Rolling Farmlands and Forest with Valleys' (5a) strongly contrast with the expansive low-lying plain of this character type.	The extensiveness of this character type would generally limit impact on adjoining character types. Sensitivity increases towards the east however where this band of 'Coastal Farmland' (4) constricts and where there is more inter-visibility with the Coastal Margin (1-3). This typology could detract from the landmark feature of the Binn of Cullen within the 'Broad Forested Hills within Upland Farmland' (8a) in this eastern area. Turbines of this size sited towards the southern boundaries of this character type could impact on smaller scale adjoining landscapes (4a) and (5) and also detract from the prominent ridge of Heldon Hill within the 'Rolling Farmlands and Forest with Valleys' (5a).	Medium	The extensiveness of this character type would generally limit impact on adjoining character types. Sensitivity increases towards the east however where this band of 'Coastal Farmland' (4) constricts and where there is more intervisibility with the Coastal Margin (1-3). This typology could detract from the landmark feature of the Binn of Cullen within the 'Broad Forested Hills within Upland Farmland' (8a) in this eastern area. Turbines of this size sited towards the southern boundaries of this character type could impact on smaller scale adjoining landscapes (4a) and (5) and also detract from the prominent ridge of Heldon Hill within the 'Rolling Farmlands and Forest with Valleys' (5a).	Medium
Scale and	A generally open and expansive	Although this typology could relate to	High- medium	Turbines towards the lower height	High- medium
openness	coastal plain but with more rolling landform, occasional outcrop hills and	the scale of the landform, settlement and other land cover features would	meaium	band of this typology could relate to broader low-lying basins where	mealalli

	woodlands providing containment in some areas. A lower lying linear shallow basin extending south/west to north/east is larger in scale and particularly open. This landscape is well settled with a regular pattern of farms, houses and settlements providing ready scale references.	be dominated by these very tall turbines. If sited on or nearby the small outcrop hills which are landmark features within this landscape, turbines of this size would overwhelm their low vertical scale. Areas of more rolling landform similarly have a smaller scale which would be dominated by turbines of this size.		settlement is sparser although this typology in general would appear very large in relation to buildings and woodlands. If sited on or nearby the small outcrop hills which are landmark features within this landscape, turbines of this size would overwhelm their low vertical scale. Areas of more rolling landform similarly have a smaller scale which would be dominated by turbines of this size.	
Landform	This landscape has a predominantly subtly undulating landform but with some occasional landmark hills and ridges including Quarry Wood and Hill of Spynie close to Elgin and Tappoch and Binn Hill closer to the coast. Pockets of more complex rolling landform occur in the Urqhart and Lhanbryde area and small knolly hills NE of Elgin. The broad floodplains of the Spey and Lossie and a band of very low-lying drained land between Lossiemouth and Kinloss have a particularly simple landform.	The generally simple gently undulating to flat landform of this character type reduces sensitivity although this typology would detract from the prominent hills and ridges and small areas of more complex rolling landform if sited on or nearby them.	Medium-low	The generally simple gently undulating landform of this character type reduces sensitivity although this typology would detract from the prominent hills and ridges and small areas of more complex rolling landform if sited on or nearby them.	Medium-low
Landscape pattern	A simple land cover pattern of large arable fields interspersed with small blocks of conifers. Some larger coniferous plantations occur close to the coast and the Spey Valley. Small pockets of more diverse land cover pattern are associated with the policies of mixed shelterbelts, parkland	This typology could relate to the simple and generally open character of farmland although policy features and more natural vegetation cover would be more sensitive.	Medium-low	This typology could relate to the simple and generally open character of farmland although policy woodlands and more natural vegetation cover would be more sensitive.	Medium-low

Built environment	and avenues of Innes House, Gordon Castle, Brodie Castle and Gordonstoun, the more naturalistic moss and woodland of the Bauds of Cullen and Spynie Moss and broadleaved woodlands, scrub and wetlands along the Spey. RAF air fields and associated buildings and infrastructure including tall masts are concentrated in the Kinloss, Lossiemouth and Burghead area. Dispersed farms, houses, small and larger settlements and occasional historical buildings including the Old Castle of Duffus, Palace of Spynie and grand houses/castles with designed landscapes as well as church spires form landmark features. Larger warehouses, maltings and some quarrying and landfill sites form occasional features and there is a well-developed network of roads and some transmission lines.	This typology would dominate the setting of small settlements, farms and houses in this well settled landscape. Historic built features would also be sensitive to intrusion on their setting although these features are widely dispersed. The presence of some infrastructure and industrial development in this landscape reduces sensitivity to an extent, although the introduction of large turbines would accentuate this aspect of landscape character. Multiple developments of single and small groups of turbines could significantly increase the clutter of disparate elements in this landscape.	High- medium	This typology would dominate the setting of small settlements, farms and houses in this well settled landscape. Historic built features would also be sensitive to intrusion on their setting although these features are widely dispersed. The presence of some infrastructure and industrial development in this landscape reduces sensitivity to an extent, although the introduction of large turbines would accentuate this aspect of landscape character and (particularly if multiple developments of single and small groups of turbines occurred) could significantly increase the clutter of disparate elements in this	High- medium
Perceptual qualities	This is a well-settled and highly managed landscape with no sense of wildness or other strong perceptual qualities.	Sensitivity is reduced due to the absence of sensitive perceptual qualities.	Low	Sensitivity is reduced due to the absence of sensitive perceptual qualities.	Low
Visual amenity	This landscape can be very open in places with extensive and unimpeded views possible from major roads such as the A96 and from the dense	This size of turbine would be highly visible from roads and settlement within this open landscape where it could compete with the foci of	High	This size of turbine would be highly visible from roads and settlement within this open landscape. There may be more scope to site turbines	High

network of minor roads which crisscross this character type. Forestry and subtle ridges limit the extent of views in other areas.

The prominent hills of Binn Hill, Tappoch and Quarry Wood form focal features in views across this landscape.

There are views to the uplands of Moray to the south from this area, with Ben Rinnes, Ben Aigan and Brown Muir forming key features. The Moray Firth and distant Sutherland coast also feature in views to the north. Infrastructure and buildings associated with the RAF are highly visible as are the wind turbines at Findhorn and masts in the western part of this landscape towards the coast. In terms of views to this landscape from the surrounding area, close views are limited from the Coastal Margin (1-3) due to screening provided by forests and landform to the west of the Spev. Some inter-visibility between the coast and this landscape occurs east of the Spey however. The north-facing settled slopes of Heldon Hill within the 'Rolling Farmland and Forest with Valleys' (5a), the 'Rolling Farmland and Forest' (5) and the 'Coastal Farmland with Rolling Hills' (4a) have open and elevated views across this landscape and over the Moray Firth.

prominent hills and would be likely to form a dominant feature.

Turbines of this size would also be highly visible from the often well-settled north-facing slopes of adjacent character types. Although close views from the 'Coastal Margin' (1-3) are likely to be screened by forest and a coastal ridge west of the Spey, this typology would be visible from sections of the coast east of the Spey and they would also be seen in longer and more open views along the coast from promontories and bays where the hinterland is more visible.

towards the lower height of this typology to minimise effects on existing foci.

Turbines of this size would be highly visible from the often well-settled north-facing slopes of adjacent character types. Although close views from the 'Coastal Margin' (1-3) are likely to be screened by forest and a coastal ridge west of the Spey, this typology would be more visible from sections of the coast east of the Spey and they would also be seen in longer and more open views along the coast from promontories and bays where the hinterland is more visible.

Cumulative effects	The small group of turbines at Findhorn are visible from settlements and roads in the western part of Moray. The Rothes and Hill of Towie wind farms are visible north and east of Elgin seen on the skyline of the distant uplands of the 'Upland Moorland and Forestry' (9) and 'Broad Forested Hills within Upland Farmland' (8a) at distances of between 10-18km. The Boyndie wind farm is sited approximately 11km to the east of Moray with limited visibility from this low-lying character type.	Cumulative issues with wind farms already sited within the upland landscapes to the south are unlikely to be significant over much of this character type due to the distances involved and the extensiveness of views which lessens their visual impact. The area south and east of Elgin and the Spey Valley are more sensitive. Sequential effects on views from the A98 may occur with wind farm developments sited in Aberdeenshire.	Medium-low	Cumulative issues with wind farms already sited within the upland landscapes to the south are unlikely to be significant over much of this character type due to the distances involved and the extensiveness of views which lessens their visual impact. The area south and east of Elgin and the Spey Valley are more sensitive. Sequential effects on views from the A98 may occur with wind farm developments sited in Aberdeenshire.	Medium-low
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Character Type 4: Coastal Farmland – Sensitivity assessment for small-medium and small typologies

Topic	Summary description	Assessment of small-medium typology (35m-50m)	Sensitivity rating	Assessment of small typology (20m-35m)	Sensitivity rating
Landscape context	This character type is geographically extensive apart from at its eastern end where it narrows between the coast and the northern edge of the Broad Forested Hills within Upland Farmland (8a) and Coastal Farmland with Rolling Hills (4a). A low but distinct ridge forms a boundary between this character type and the Coastal Margin (1-3) between Lossiemouth and Burghead and this, together with the coastal forests planted on more low-lying areas, restricts close views inland to this character type from the coast. There is greater inter-visibility of these two character types east of the Spey due to the absence of screening features. The smaller scale landscapes of the 'Coastal Farmland with Rolling Hills' (4a) and the 'Rolling Farmlands and Forest' (5) and the prominent ridge of Heldon Hill within the 'Rolling Farmlands and Forest with Valleys' (5a) strongly contrast with the expansive low-lying plain of this character type.	There would be increased scope for this typology to be sited within this extensive landscape to avoid significant impact on adjoining more sensitive smaller scale landscapes. Sensitive skylines seen from the less built up sections of coast within the Coastal Margin (1-3) would still need to be avoided and turbines of this size could also still detract from key landmark features if sited nearby.	Medium-low	This size of turbine would have minimal effects on adjoining smaller scale landscapes and there is scope also to site them on gentler lower slopes of the more pronounced hills and ridges. Sensitive skylines seen from the less built up sections of coast within the Coastal Margin (1-3) would still need to be avoided however.	Low
Scale and openness	A generally open and expansive coastal plain but with more rolling landform, occasional outcrop hills and woodlands providing containment in	This typology could relate to broader low-lying basins where settlement is more sparse although turbines of this size would still appear large in	Medium	There are increased opportunities to accommodate the smaller turbines of this typology to minimise scale effects on smaller scale	Medium-low

	some areas. A lower lying linear shallow basin extending south/west to north/east is larger in scale and particularly open. This landscape is well settled with a regular pattern of farms, houses and settlements providing ready scale references.	relation to buildings and woodlands and also to the smaller prominent hills (which do not rise above 100m) and smaller scale rolling landform.		features such as woodlands and buildings.	
Landform	This landscape has a predominantly subtly undulating landform but with some occasional landmark hills and ridges including Quarry Wood and Spynie Ridge close to Elgin and Tappoch and Binn Hill closer to the coast. Pockets of more complex rolling landform occur in the Urqhart and Lhanbryde area and small knolly hills NE of Elgin. The broad floodplains of the Spey and Lossie and a band of very low-lying drained land between Lossiemouth and Kinloss have a particularly simple landform.	The generally simple gently undulating landform of this character type reduces sensitivity although this typology would detract from the prominent hills and ridges and small areas of more complex rolling landform if sited on or nearby them.	Medium-low	The generally simple gently undulating landform of this character type reduces sensitivity although even these smaller turbines would detract from the prominent hills and ridges and small areas of more complex rolling landform if sited on hill or ridge tops although there may be some limited scope to site turbines towards the lower height band of this typology on lower less prominent slopes.	Low
Landscape pattern	A simple land cover pattern of large arable fields interspersed with small blocks of conifers. Some larger coniferous plantations occur close to the coast and the Spey Valley. Small pockets of more diverse land cover pattern are associated with the policies of mixed shelterbelts, parkland and avenues of Innes House, Gordon Castle, Brodie Castle and Gordonstoun, the more naturalistic moss and woodland of the Bauds of Cullen and broadleaved woodlands, scrub and wetlands against the Spey.	This typology could relate to the simple and generally open character of farmland although policy features and more natural vegetation cover would be more sensitive.	Medium-low	There is increased scope to locate this smaller typology to avoid effects on policy features and areas with a more naturalistic vegetation cover.	Low

Built environment	RAF air fields and associated buildings and infrastructure including tall masts are concentrated in the Kinloss, Lossiemouth and Burghead area. Dispersed farms, houses, small and larger settlements and occasional historical buildings including the Old Castle of Duffus, Palace of Spynie and grand houses/castles with designed landscapes and church spires form landmark features. Larger warehouses, maltings and some quarrying and landfill sites form occasional features and there is a well-developed network of roads and some transmission lines.	This typology would dominate the setting of small settlements, farms and houses in this well settled landscape if sited nearby. Historic built features would also be sensitive to intrusion on their setting although these features are widely dispersed and there may be increased scope to site this typology to minimise effects on their setting. This typology could accentuate industrial character and clutter in parts of this landscape. Single turbines towards the lower height band of this typology and closely related to existing industrial development, would have a better scale relationship to these buildings and would minimise the spread of built infrastructure.	Medium	There is increased scope to site the smaller turbines of this typology to minimise effects on the setting of settlement and landmark historical features. The more fragmented character of disparate built structures could be exacerbated in places although there are opportunities to site this size of turbine so they are visually associated with existing built development thus reducing widespread clutter.	Medium-low
Perceptual qualities	This is a well-settled and highly managed landscape with no sense of wildness or other strong perceptual qualities.	Sensitivity is reduced due to the absence of these perceptual qualities.	Low	Sensitivity is reduced due to the absence of these perceptual qualities.	Low
Visual amenity	This landscape can be very open in places with extensive and unimpeded views possible from major roads such as the A96 and from the dense network of minor roads which crisscross this character type. Forestry and subtle ridges limit the extent of views in other areas. The prominent hills of Binn Hill, Tappoch and Quarry Wood form focal features in views across this landscape. There are views to the	This size of turbine would be highly visible from roads and settlement within this open landscape although there would be increased scope to site this typology to minimise effects on existing foci. Turbines of this size would also be visible from the often well-settled north-facing slopes of adjacent character types although they would be less prominent than larger	High- medium	Although turbines of this size would generally be taller than woodlands, they would be unlikely to be visually prominent providing they were carefully sited to avoid hill and ridge tops. There would be greater scope to accommodate multiple turbines of this size to minimise effects on views.	Medium

	uplands of Moray to the south from this area, with Ben Rinnes, Ben Aigan and Brown Muir forming key features. The Moray Firth and distant Sutherland coast also feature in views to the north. Infrastructure and buildings associated with the RAF are highly visible as are the wind turbines at Findhorn and masts in the western part of this landscape towards the coast. In terms of views to this landscape from the surrounding area, close views are limited from the Coastal Margin (1-3) due to screening provided by forests and landform to the west of the Spey. Some inter-visibility between the coast and this landscape occurs east of the Spey however. The north-facing settled slopes of Heldon Hill within the 'Rolling Farmland and Forest with Valleys' (5a), the 'Rolling Farmland and Forest with Rolling Hills' (4a) have open and elevated views across this landscape and over the Moray Firth.	typologies. This typology would be visible from sections of the coast east of the Spey and may also be seen in longer and more open views along the coast from promontories and bays where the hinterland is more visible although, again, they would be less prominent than the larger typologies in these expansive views.			
Cumulative effects	The small group of turbines at Findhorn are visible from settlements and roads in the western part of Moray. The Rothes and Hill of Towie wind farms are visible north and east of Elgin seen on the skyline of the distant uplands of the 'Upland Moorland and Forestry' (9) and 'Broad Forested Hills within Upland Farmland'	Cumulative issues with existing wind farms sited within the upland landscapes to the south are unlikely to be significant over much of this character type due to the distances involved and the extensiveness of views which lessens their visual impact. Sequential effects on views from the	Low	Cumulative issues with existing wind farms sited within the upland landscapes to the south are unlikely to be significant over much of this character type due to the distances involved and the extensiveness of views which lessens their visual impact. Sequential effects associated with	Low

(8a) at distances of between 10-18km. The Boyndie wind farm is sited approximately 11km to the east of Moray with limited visibility from this low-lying character type.	A98 may occur with wind farm developments sited in Aberdeenshire although the smaller size of this typology would be likely to reduce cumulative impacts.		wind farm development within Aberdeenshire would not be significant.	
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Character Type 4: Coastal Farmland

Summary of capacity

This landscape forms an extensive low-lying plain which is generally gently undulating to flat but also features pockets of more rolling landform and occasional prominent hills and ridges. While the broad scale of the landscape and its predominantly simple landform and land cover pattern reduce sensitivity, the very tall turbines of the larger typologies (turbines > 50m) would dominate both the scale of farms and domestic buildings, dispersed fairly evenly across this landscape, but also the larger industrial buildings which are an occasional feature of this character type. They could also exacerbate the fragmented character of infrastructure present in some areas. The more prominent hills and ridges within this character type and adjacent more sensitive landscape character types, particularly east of the Spey where the Coastal Farmland (4) forms a much narrower band, are also key sensitivities. There would be a *High-medium* landscape sensitivity to the large (turbines 80-130m) and the medium (turbines 50-80m) typologies, a *Medium* sensitivity to the small-medium typology (35-50m) and a *Medium-low* sensitivity to the small (20-35m) typology.

Potential cumulative issues

The Rothes and Hill of Towie wind farms are visible intermittently from settlements and main roads between the Spey Valley and Elgin within this character type and further north towards the coast to the west of Elgin. The Rothes wind farm occupies a relatively low and less prominent section of the long backdrop formed by the 'Upland Moorland and Forestry' (9) and this, together with the distance of this development from much of the Coastal Farmland (4), limits visual impact. An 18 turbine extension to the Rothes wind farm has been consented and this will form a relatively tight grouping with the original 28 turbines and not significantly spread the extent of development seen on the skyline.

The Hill of Towie wind farm is located within the 'Broad Forested Hills within Upland Farmland' (8a) and was under construction during our field survey. This development is set well back from the Coastal Farmland (4) which reduces its impact. The sensitivity assessment for the 'Broad Forested Hills within Upland Farmland' (8a) concludes that there is scope to accommodate larger development typologies. Any development within the areas of the 'Broad Forested Hills within Upland Farmland' (8a) which adjoin the 'Coastal Farmland' (4) could limit scope for additional development of all development typologies nearby.

Key cumulative issues that may arise within the Coastal Farmlands (4) are likely to include:

- An absence of rationale which could occur between existing large turbines clearly associated with less settled simple and more expansive upland areas (LCTs 9 and 10), any potential larger typologies sited within LCT 8a and the same size of turbines also sited within this more settled landscape.
- Multiple larger turbines (turbines >50m) which would be inter-visible in areas
 where this landscape is particularly open and could be seen widely from
 settlement and more elevated sections of the A96 and other roads, forming
 dominant features if repeated across the character type.

- Variations in the type and size of single and small groups of small turbines proposed within the landscape type.
- Sequential visual impacts experienced when travelling through this landscape, including potential cumulative effects associated with operational and proposed wind farms within neighbouring Aberdeenshire.

Constraints

- Pockets of more rolling landform and woodlands which create a more complex and smaller scale landscape in the Lhanbryde/Urquhart area and small knolly hills against the Lossie on the north-east side of Elgin.
- The prominent small hills and ridges which rise abruptly from the generally low-lying coastal plain and include Binn Hill and Tappoch close to the coast, Cluny Hill within Forres and the ridge of Quarry Wood next to Elgin.
- The extensive wooded policies and designed landscapes of Innes House,
 Brodie Castle. Gordonstoun and Gordon Castle.
- The well-settled character of this landscape where development could dominate the scale of buildings.
- Areas with a more fragmented character where buildings and infrastructure
 has resulted in an overly cluttered appearance and where additional tall
 structures could exacerbate these detractive components of character.
- The setting of settlements and landmark historical and archaeological features including Spynie Palace and Old Duffas Castle.
- The narrow extent of this character type east of the Spey where larger turbines would be likely to impact on the adjacent more sensitive landscapes of the 'Coastal Margin' (1-3) and the smaller scale 'Coastal Farmlands with Rolling Hills' (4a) but could also detract from the landmark hill of the Binn of Cullen located within the 'Broad Forested Hills within Upland Farmland' (8a).
- The openness of this landscape and its well-settled character which increases visual sensitivity and reduces capacity for multiple developments, particularly larger turbines >50m high.

Opportunities

- The broad extent of much of this character type which provides opportunities for development to be sited away from adjacent more sensitive landscapes and allows space for a limited number of developments of small-medium turbines (35-50m) to form widely spaced repeated features thus minimising visual dominance.
- The predominantly gently undulating to flat landform of this landscape and its simple land cover.

Guidance on development

No scope for the large (80m-130m) and medium (50m -80m) typologies has been identified in this landscape sensitivity assessment.

There is some scope to accommodate the small-medium typology (35-50m) in this landscape. Turbines this size would be less likely to overwhelm the scale and setting of settlement and would be less visually prominent particularly in relation to multiple developments. They would still appear large even in relation to larger farm buildings and occasional larger industrial buildings but could be sited in less densely settled areas, set below low ridge lines to benefit from some back-cloth of rising ground

which would reduce prominence and apparent height to some degree. Turbines of this size should not be sited on, or nearby, the landmark hills in this and adjacent character types, and within areas with a more complex smaller scale rolling landform. They should also be sited to avoid intrusion on the setting of settlements, historic and archaeological features and designed landscapes.

There are increased opportunities for the small typology (20m –35m) to be sited in this character type as multiple turbines could be accommodated with fewer associated cumulative impacts. Turbines of this size, if well-sited, would be more likely to form an incidental rather than a dominant feature if repeated across this landscape. These smaller turbines should also be sited away from the smaller landmark hills, although there may be some limited scope to site them on gentler lower slopes of the larger ridges and within areas with a more rolling landform as long as more prominent hill tops were avoided. The setting of some settlements, historic and archaeological features and designed landscapes would be sensitive even to these smaller turbines.

Capacity is likely to be quickly reached in this open landscape where inter-visibility between developments (and the well-settled nature of this landscape) increases potential for significant cumulative landscape and visual effects to occur. The use of turbines of different designs and sizes in proximity to each other should be avoided as this could lead to visual confusion and a discordant appearance, particularly given the presence of existing industry and infrastructure which already creates a cluttered character in places. There would be greater scope to site multiple turbines <35m than taller turbines which were visually associated with farms and other buildings than introduce a new pattern of taller turbines unrelated to existing buildings which would be likely to form dominant features if constructed in significant numbers. Periodic monitoring will be essential to consider cumulative landscape and visual effects in detail within this character type.

Micro siting should follow the guidance set out in Section 5 of the main study report.



Binn Hill forms one of the 'landmark' hills , prominent in views across the low-lying Coastal Farmland



Landform becomes more complex, forming smaller rolling hills in the Lhanbryde area.



Castles, mansion houses and their wider wooded policies form occasional features in this landscape and would be highly sensitive to intrusion by wind turbines



Additional turbines could exacerbate the visual clutter of operational wind turbines, masts and other built infrastructure present in some parts of this landscape.

Character Type 4: Coastal Farmland

Character Type 4a: Coastal Farmland with Rolling Hills

Introduction

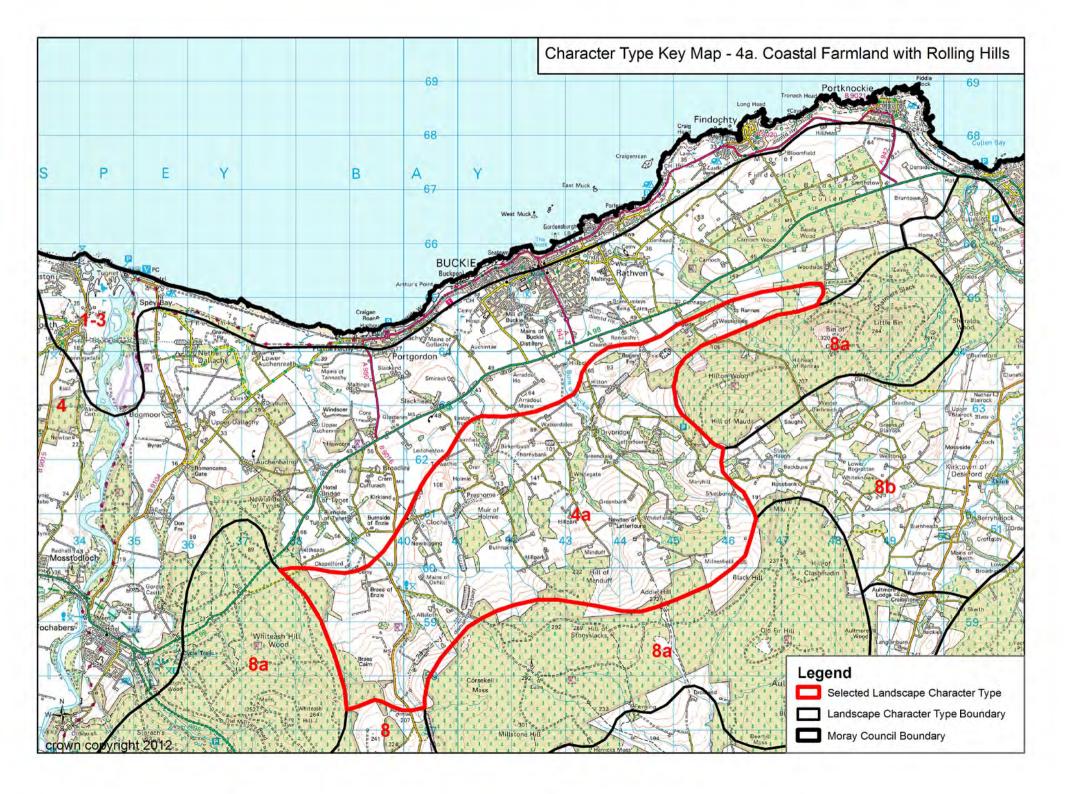
The Coastal Farmland (4) landscape character type identified in the Moray and Nairn landscape assessment generally forms a low-lying plain extending east/west across Moray.

A single sub-division of this character type has been defined in the east where the landscape forms small scale rolling hill fringes to the broad forested plateau of Aultmore and contrasts with the more open and expansive 'Coastal Farmland' (4). This landscape straddles both the 'Coastal Farmland' (4) and 'Upland Farmland' (8) defined in the Moray and Nairn Landscape Assessment and the boundaries of both these character types have been redrawn to create this new landscape sub-type which has been named 'Coastal Farmland with Rolling Hills' (4a).

The sensitivity assessment that follows considers the Coastal Farmland with Rolling Hills (4a) character type.

Existing/consented wind farm development

There are no wind turbines located in this character type and no wind turbine developments situated in adjacent landscapes are visible from this area.



Character Type 4a: Coastal Farmland with Rolling Hills – Sensitivity assessment for large and medium typologies

Topic	Summary description	Assessment of large typology	Sensitivity	Assessment of medium	Sensitivity
Landscape context	This character type comprises a small area of north-facing rolling hills fringing the 'Broad Forested Hills within Upland Farmland' (8a) which lies to the south. It forms the foreground in some views to the landmark hill of Bin of Cullen which is located in (8a). The 'Coastal Farmland' (4) abuts this landscape to the north and forms a narrow band in this area, fringed by the 'Coastal Margin' (1-3).	(80m-130m) The 'Broad Forested Hills within Upland Farmland' (8a) has a simple landform and land cover and is very sparsely settled. This landscape generally has a reduced sensitivity to larger turbine typologies although turbines of this size sited in the 'Coastal Farmland with Rolling Hills' (4a) could detract from the landmark hill of Bin of Cullen which lies in (8a). Turbines of this size would impact on the 'Coastal Farmland' (4), which is well settled and open, increasing sensitivity. There would be limited effects on the 'Coastal Margin' (1-3) due to its visual containment and distance from the 'Coastal Farmland with Rolling Hills' (4a).	rating High- medium	typology (50m-80m) The 'Broad Forested Hills within Upland Farmland' (8a) has a simple landform and land cover and is very sparsely settled. This landscape generally has a reduced sensitivity to larger turbine typologies although turbines of this size sited in the 'Coastal Farmland with Rolling Hills' (4a) could detract from the landmark hill of Bin of Cullen which lies in (8a). Turbines of this size would impact on the 'Coastal Farmland' (4), which is well settled and open, increasing sensitivity. There would be limited effects on the 'Coastal Margin' (1-3) due to its visual containment and distance from the 'Coastal Farmland with Rolling Hills' (4a).	rating High- medium
Scale and openness	A rolling landform with small hills cut by narrow valleys offers a degree of containment and reduces scale. This landscape is well-settled with a dispersed pattern of small farms and these, together with woodlands, provide ready scale references. The landscape becomes more open on upper hill slopes which are broader at the transition with the 'Broad Forested Plateau within Upland Farmland' (8a).	This typology would dominate the largely small to medium scale of this landscape. The consistent presence of small features, including dispersed settlement, is a further sensitivity.	High	This typology would dominate the largely small to medium scale of this landscape. The consistent presence of small features, including dispersed settlement, is a further sensitivity.	High

Landform	Small rounded interlocking hills are cut by narrow incised burns. Landform is generally more complex on the lower slopes with broader, more even gradients on upper slopes and occasional small flatter areas.	Broader upper hill slopes and small areas of flatter ground are limited in extent reducing scope to accommodate multiple turbines of this size. The pattern of more complex rolling landform and narrow valleys is a further sensitivity.	High	Broader upper hill slopes and small areas of flatter ground are limited in extent reducing scope to accommodate multiple turbines of this size. The pattern of more complex rolling landform and narrow valleys is a further sensitivity.	High
Landscape pattern	Cultivated fields alternate with woodlands. Some woodlands are diverse comprising mixed conifers and broadleaves in valleys and forming the policies of Letterfourie House, which lies on the lower slopes of Hill of Maud and Cairnfield House set within a wooded valley on the lower hill slopes.	This typology could impact on more diverse woodlands and parkland associated with designed landscapes although more extensive upland pastures on upper hill slopes would be less sensitive.	High- medium	This typology could impact on more diverse woodlands and parkland associated with designed landscapes although more extensive upland pastures on upper hill slopes would be less sensitive.	High- medium
Built environment	This landscape is well-settled with a regular pattern of dispersed farms and houses and small settlements such as Drybridge and Clochan tucked down on lower hill slopes. Public roads are generally very narrow and winding.	More sparsely settled upper hill slopes would be less sensitive in terms of avoiding impact on the immediate setting of settlements and other built features although turbines of this size would be likely to be seen in relative proximity to built features given settlement density and the limited extent of the character type. Narrow roads could result in landscape and visual effects associated with access improvements for vehicles required to transport this typology.	High	More sparsely settled upper hill slopes would be less sensitive in terms of avoiding impact on the immediate setting of settlements and other built features although turbines of this size would be likely to be seen in relative proximity to built features given settlement density and the limited extent of the character type. Narrow roads could result in landscape and visual effects associated with access improvements for vehicles required to transport this typology.	High
Perceptual qualities	This is a well-settled and highly managed landscape with no sense of wildness or other strong perceptual qualities.	Sensitivity is reduced due to the absence of these perceptual qualities.	Low	Sensitivity is reduced due to the absence of these perceptual qualities.	Low

Visual amenity	There is a degree of visual containment offered by the rolling landform, incised valleys and woodlands when travelling on the narrow roads within this character type. Settlement is generally orientated northwards, taking advantage of extensive views to the Moray Firth. The even forested skyline of the 'Broad Forested Plateau within Upland Farmland' (8a) is visible from more elevated roads. Views to this landscape from the south are limited by the higher forested ground of the 'Broad Forested Plateau within Upland Farmland' (8a). From the north, the rolling hill slopes of this character type are foreshortened and woodlands also coalesce, screening more open farmland and settlement. The A98 is aligned close-by and the Coastal Farmland (4) and 'Coastal Margin' (1-3) is well settled.	This size of turbine would be highly visible from more open roads and elevated settlement within this landscape. This typology would also be highly visible from the well-settled 'Coastal Farmland' (4) and the 'Coastal Margin' (1-3) and could impact on key views to the Bin of Cullen if sited on lower hill slopes. Turbines of this size may also be seen on the skyline from the 'Upland Farmland' (8) to the south although would be likely to perceived as being associated 'Broad Forested Plateau within Upland Farmland' (8a) which forms a fairly uniform forested skyline in these views.	High	This size of turbine would be highly visible from more open roads and elevated settlement within this landscape. This typology would also be highly visible from the well-settled 'Coastal Farmland' (4) and the 'Coastal Margin' (1-3) and could impact on key views to the Bin of Cullen if sited on lower hill slopes. Turbines of this size are less likely to be visible from the 'Upland Farmland' (8) to the south due to the screening provided by the higher ground of the 'Broad Forested Hills within Upland Farmland' (8a).	High
Cumulative effects	There are no existing wind turbines sited in this landscape or visibility of turbine development in other landscapes.	No potential cumulative effects would occur on the basis of existing or consented developments.	Low	No potential cumulative effects would occur on the basis of existing or consented developments.	Low

Character Type 4a: Coastal Farmland with Rolling Hills – Sensitivity assessment for small-medium and small typologies

Topic	Summary description	Assessment of small-medium	Sensitivity	Assessment of small typology	Sensitivity
		typology (35m-50m)	rating	(20m-35m)	rating
Landscape context	This character type comprises a small area of north-facing rolling hills fringing the 'Broad Forested Hills within Upland Farmland' (8a) which lies to the south. It forms the foreground in some views to the landmark hill of Bin of Cullen which is located in (8a). The 'Coastal Farmland' (4) abuts this landscape to the north and forms a narrow band in this area, fringed by the 'Coastal Margin' (1-3).	This typology would have a limited effect on the 'Broad Forested Hills within Upland Farmland' (8a) provided turbines were located to avoid intrusion on key views to the landmark hill of the Bin of Cullen. Turbines of this size, sited on lower hills would impact on the 'Coastal Farmland' (4) although there is some scope to reduce impacts by siting this typology on upper hill slopes at the transition with the 'Broad Forested Hills within Upland Farmland' (8a).	Medium	This typology would have a limited effect on the 'Broad Forested Hills within Upland Farmland' (8a) provided it was located to avoid intrusion on key views to the landmark hill of the Bin of Cullen. Turbines of this size would be likely to have minimal effects on the 'Coastal Farmland' (4).	Medium-low
Scale and openness	A rolling landform with small hills cut by narrow valleys offers a degree of containment and reduces scale. This landscape is well-settled with a dispersed pattern of small farms and these, together with woodlands, provide ready scale references. The landscape becomes more open on upper hill slopes which are broader at the transition with the 'Broad Forested Plateau within Upland Farmland' (8a).	This typology would appear very large in relation to smaller hills, settlement and woodlands although broader more open upper hill slopes at the transition with the 'Broad Forested Plateau within Upland Farmland' (8a) would be less sensitive. The consistent presence of small features, including dispersed settlement, is a further sensitivity.	High- medium	There is increased scope to site this typology within broader upper hill slopes but also on more open areas on lower farmed slopes. Narrow valleys and small rolling hills remain sensitive. While this typology would appear large in relation to domestic buildings if sited nearby they could relate better to the occasional larger agricultural sheds present in this landscape.	Medium
Landform	Small rounded interlocking hills are cut by narrow incised burns. Landform is generally more complex on the lower slopes with broader more even gradients on upper slopes and occasional small flatter areas.	Single and small groups <3 turbines of this typology could relate to broader, upper hill slopes although this size of turbine would be likely to detract from nearby more complex landform if sited on small areas of flatter ground on lower slopes.	High- medium	There would be increased scope to locate this typology to minimise effects on more complex landform.	Medium

Landscape pattern	Cultivated fields alternate with woodlands. Some woodlands are diverse comprising mixed conifers and broadleaves in valleys and forming the policies of Letterfourie House, which lies on the lower slopes of Hill of Maud and Cairnfield House set within a wooded valley on the lower hill slopes.	Turbines of this size could also impact on more diverse woodlands and parkland associated with designed landscapes although more extensive upland pastures on upper hill slopes would be less sensitive.	High- medium	Although designed landscape features would be sensitive to all development typologies sited within their boundaries, turbines towards the lower height band of this typology would be less likely to impact on these features if sited nearby, helped by the partial screening likely to be provided by landform and woodlands.	Medium
Built environment	This landscape is well-settled with a regular pattern of dispersed farms and houses and small settlements such as Drybridge and Clochan tucked down on lower hill slopes. Public roads are generally very narrow and winding.	More sparsely settled upper hill slopes would be less sensitive in terms of avoiding impact on the immediate setting of settlements and other built features.	High- medium	There is increased scope to site the smaller turbines of this typology to minimise effects on the setting of settlement.	Medium
Perceptual qualities	This is a well-settled and highly managed landscape with no sense of wildness or other strong perceptual qualities.	Sensitivity is reduced due to the absence of these perceptual qualities.	Low	Sensitivity is reduced due to the absence of these perceptual qualities.	Low
Visual amenity	There is a degree of visual containment offered by the rolling landform, incised valleys and woodlands when travelling on the narrow roads within this character type. Settlement is generally orientated northwards, taking advantage of extensive views to the Moray Firth. The even forested skyline of the 'Broad Forested Plateau within Upland Farmland' (8a) is visible from more elevated roads. Views to this landscape from the south are limited by the higher forested Plateau ground of the 'Broad Forested Plateau	Although this size of turbine would be visible from more open roads and elevated settlement within this landscape, there would be increased scope to site them to avoid prominent skyline locations. This typology would not be visible from the 'Upland Farmland' (8) to the south although it could impact on views to the landmark hill of the Bin of Cullen if sited on lower hill slopes. Turbines would be likely to form prominent features from the well-settled 'Coastal Farmland' (4) although intrusion could be limited by	High- medium	This typology (and particularly turbines towards the lower height band of <25m) would be more likely to be partially screened by coalescing woodlands and landform in views from within this landscape and from the 'Coastal Farmland' (4), limiting their visual intrusion.	Medium

	within Upland Farmland' (8a). From the	careful siting below the skyline.			
	north, the rolling hill slopes of this				
	character type are foreshortened and				
	woodlands also coalesce, screening				
	more open farmland and settlement.				
	The A98 is aligned close-by and the				
	Coastal Farmland (4) and 'Coastal				
	Margin' (1-3) is well settled.				
Cumulative	There are no existing wind turbines	No potential cumulative effects would	Low	No potential cumulative effects	Low
effects	sited in this landscape or visibility of	occur on the basis of existing or		would occur on the basis of existing	
	turbine development in other	consented developments.		or consented developments.	
	landscapes.				

Character Type 4a: Coastal Farmland with Rolling Hills

Summary of capacity

This landscape of small rolling hills fringes the higher and simpler 'Broad Forested Hills within Upland Farmland' (8a). The interlocking hills of Coastal Farmland with Rolling Hills (4a) have a varied landform with steeper slopes and narrow incised valleys interspersed with occasional flatter areas and broader, more gently graded upper slopes. Long belts of broadleaved trees and mixed woodlands are associated with the policies of Cairnfield and Letterfourie Houses and fill the narrow valleys, enriching this landscape. The rolling landform and woodlands create a small to medium scale landscape with houses, farms and small settlements introducing small features which are dispersed across this landscape.

The small to medium scale of these settled rolling hill fringes and the presence of more diverse policy features increase sensitivity to larger typologies within this landscape. There would be overall *High* landscape sensitivity to the large (80-130m) and the medium (50-80m) typologies. Sensitivity would be *High-medium* for the small-medium typology (35-50m) and *Medium* for the small typology (20-35m).

Potential cumulative issues

No existing wind turbines are visible from this landscape. However scope has been identified in this study for the large and medium typologies (turbines up to 130m) within the adjacent 'Broad Forested Hills within Upland Farmland' (8a) to the south and for the small-medium typology (turbines up to 50m) in the 'Coastal Farmland' (4) (although with some constraints identified in the immediate narrow band of this character type in the east including effects on adjacent landscapes and on the landmark hill of the Bin of Cullen).

Key cumulative issues that may arise within the Coastal Farmlands with Rolling Hills (4a) are likely to include:

- An absence of rationale which could occur between existing large turbines clearly associated with less settled simple and more expansive upland areas and the same size of turbines also sited within this more settled and smaller scale landscape.
- Cumulative effects between any larger typologies sited within the adjacent 'Broad Forested Plateau within Upland Farmland' (8a) and turbines sited in this character type.
- Multiple turbines sited within this character type which would be inter-visible, particularly from the more open upper hill slopes of this character type and also from the adjacent 'Coastal Farmland' (4) with larger typologies quickly forming dominant features.
- Variations in the type and size of single and small groups of small turbines proposed within the landscape type.

Constraints

- The small to medium scale of this rolling landscape which is reinforced by the presence of woodlands and a regular pattern of dispersed settlement.
- An often complex landform of small interlocking hills and narrow valleys particularly characteristic of the lower and middle slopes of this landscape.

- A rich pattern of policy landscape features including belts of broadleaved trees and parkland but also the more diverse mixed woodlands within narrow valleys.
- The foreground this landscape provides to views to the landmark hill of the Bin of Cullen from the A98.
- The proximity of this landscape to the 'Broad Forested Plateau within Upland Farmland' (8a) where scope for larger development typologies has been identified in this study and where potential cumulative effects could occur.

Opportunities

- Upper hill slopes which are generally gentler and more open and where the land cover pattern is less pronounced (and settlement sparser in some areas).
- Occasional larger agricultural buildings where the small typology could relate to their scale if sited nearby.

Guidance on development

No scope for the large (80m-130m) and medium (50m -80m) typologies has been identified in this sensitivity assessment.

There is likely to be *limited* scope for the small-medium (35m - 50m) development typologies to be sited within this character type. Opportunities are limited to the more expansive and less well-settled gently graded upper hill slopes at the transition with the 'Broad Forested Hills within Upland Farmland' (8a). This character type (8a) has been identified in the assessment as having scope for additional larger typologies and cumulative effects will therefore need to be reviewed as new proposals are considered in both these adjoining landscape character types.

There are some increased opportunities for the small typology (20m –35m) to be sited in this character type. Turbines of this size could also be located on more gently graded farmland but set well away from more diverse policy plantings and the narrow densely wooded valleys which are a distinctive feature of this landscape. Turbines should not be sited on the top of prominent small hill tops with gentler lower slopes providing more scope to limit visual impact. Intrusion on key views from the A98 to the landmark hill of Bin of Cullen should be avoided. This character type is limited in extent and it could quickly become cluttered if multiple developments occurred. Individual turbines are likely to be easier to accommodate than groups, which should be limited to no more than three turbines.

Turbines of less than 20m in height could more readily be accommodated within the farmed and settled areas of this landscape type and would be less visible due to their increased ability to be screened by landform and woodland, especially in views from the 'Coastal Farmland' (4).

Micro siting should follow the guidance set out in Section 5 of the main study report.



The landscape becomes more open and has a broader scale on upper hill slopes.



Long belts of broadleaved trees separate gently rolling fields.



The 'Broad Forested Hills within Upland Farmland' (8a) form a low, even forested backdrop to this character type.



Mixed woodlands, some of these forming the policies to mansion houses, occupy the narrow valleys on lower hill slopes

Character Type 4a: Coastal Farmland with Rolling Hills