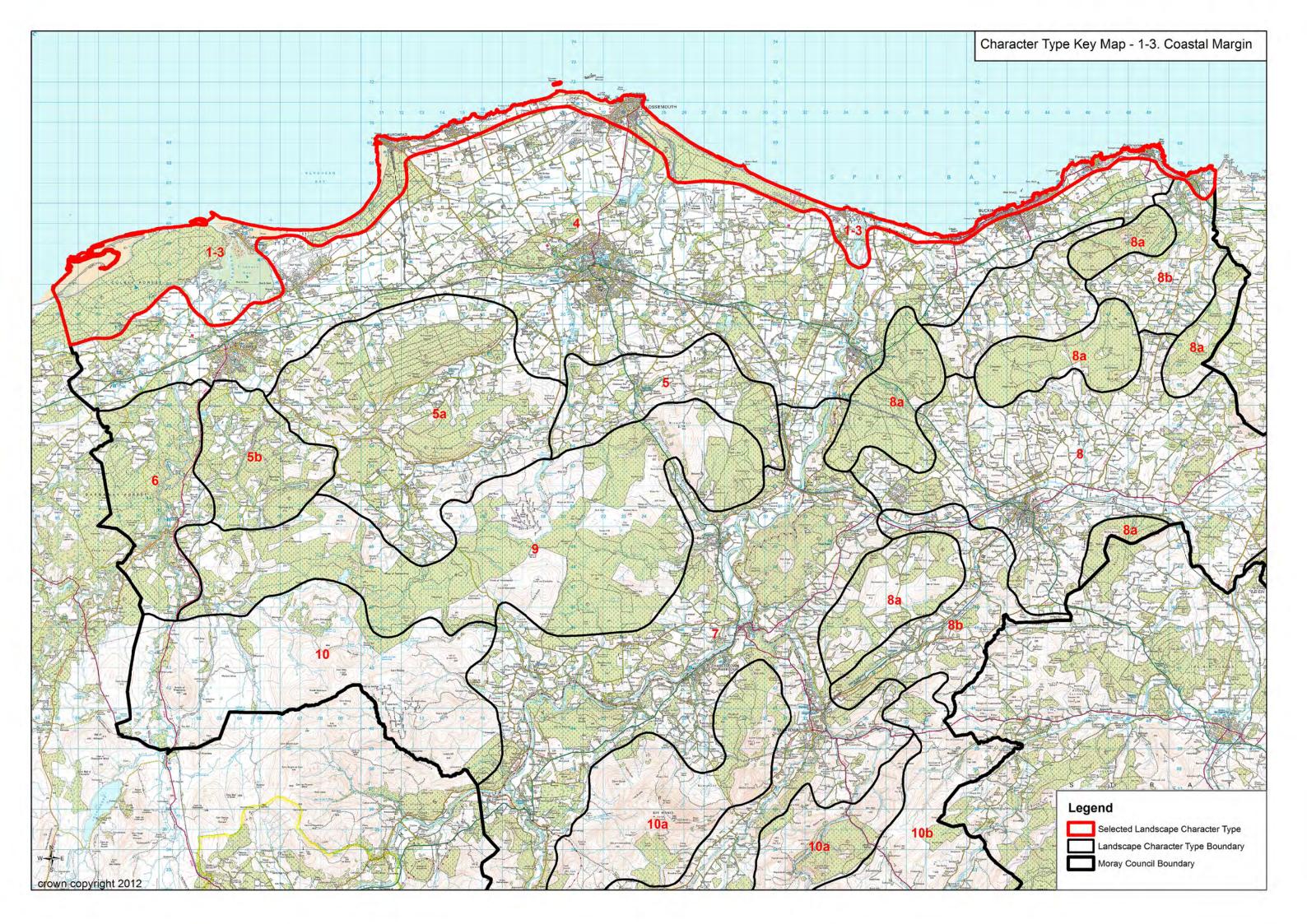


# 4. Sensitivity assessment of landscape character types

#### Introduction

- 4.1 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.
- 4.2 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.
- 4.3 A summary of the sensitivity assessment is provided only in this main report with detailed sensitivity tables contained in a separate Appendix Report. 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 within this report.
- 4.4 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.
- 4.5 Figure 3 shows an overview of character types and sub-types within Moray. More detailed maps showing each landscape character type/sub-type and their immediate context 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 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.

### 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). Landscape sensitivity for the small (20-35m) typology would be *High-medium*.

#### **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 prominently sited towns.
- 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**

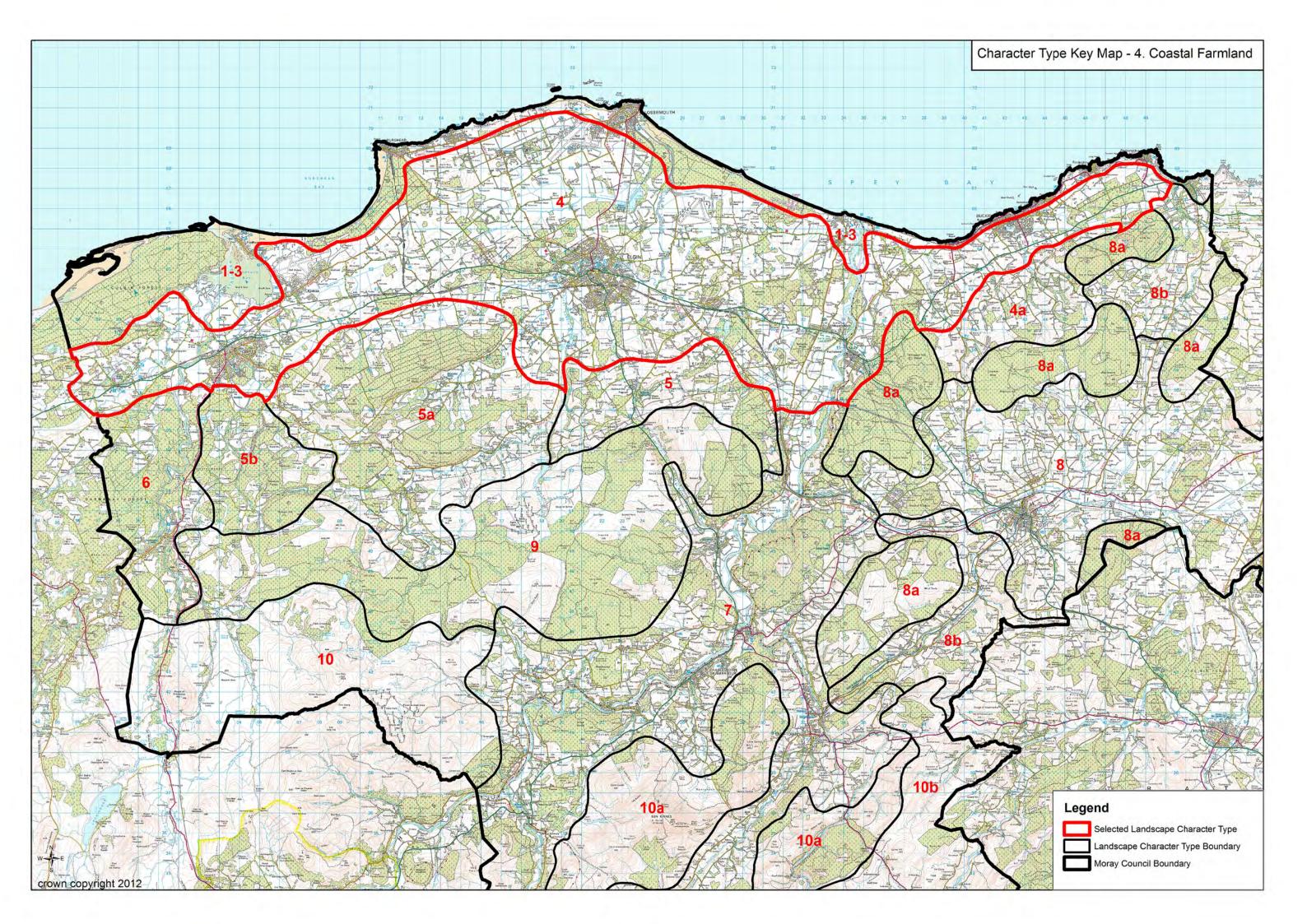
• There are no opportunities for turbines above 20m high in this landscape.

### **Guidance on development**

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

Small turbines below 20m high could be accommodated 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 this report.



# **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 wind farm, 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.

#### 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.

### **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**

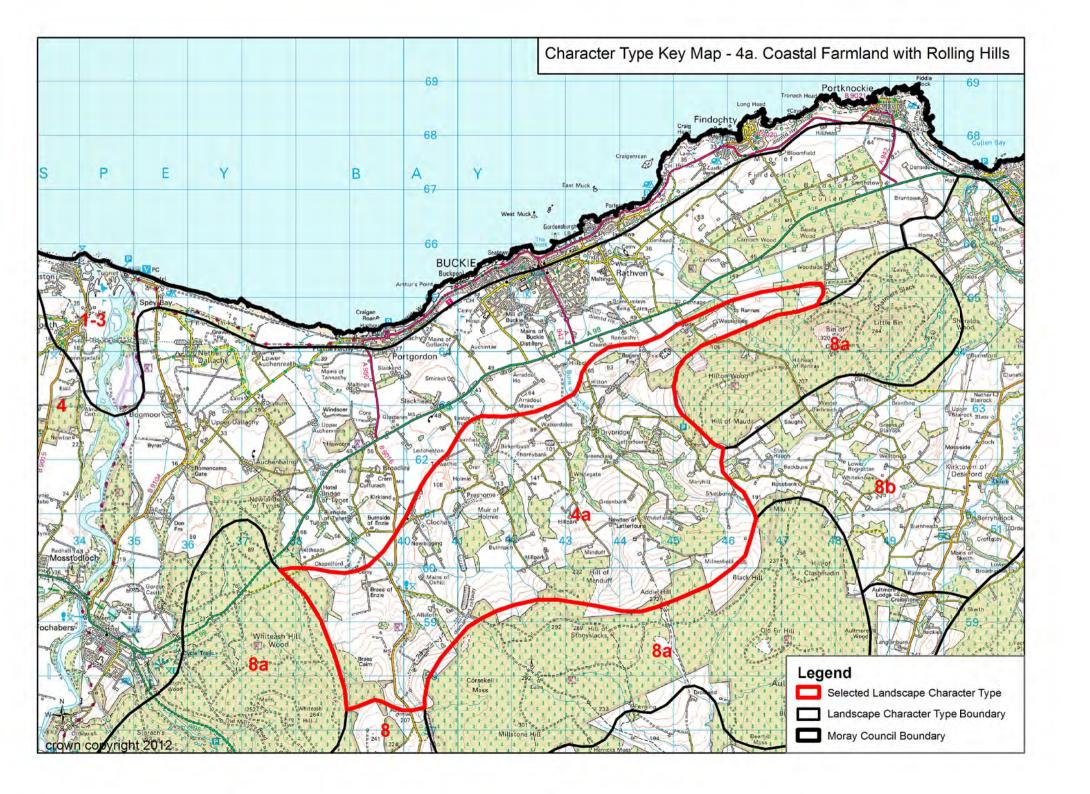
No scope for the large (80m-130m) and medium (50m -80m) typologies has been identified in this landscape sensitivity assessment.

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 this report.



# **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.

## 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).

#### 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.

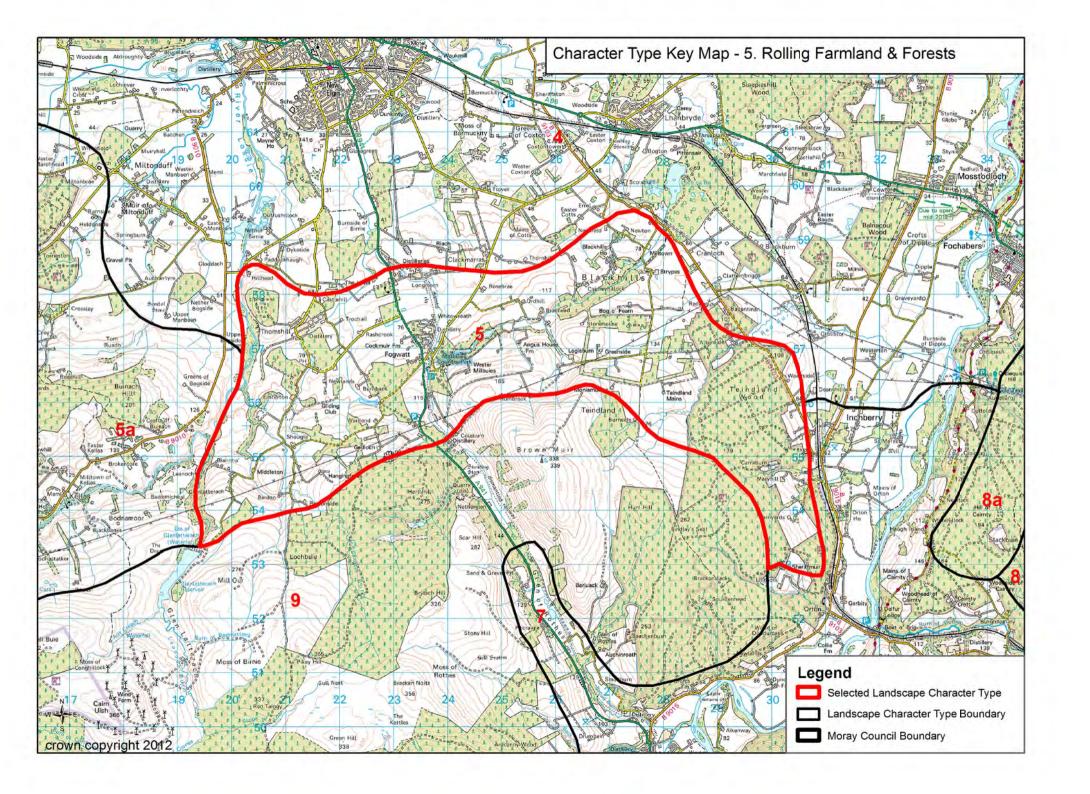
There is likely to be *limited* scope for the small-medium (35m - 50m) development typologies to be sited within this character type. Opportunities are limited to the more expansive and less well-settled gently graded upper hill slopes at the transition with the 'Broad Forested Hills within Upland Farmland' (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 this report.



# **Character Type 5: Rolling Farmland and Forests**

#### Introduction

The Rolling Farmland and Forests (5) landscape character type is shown in the Moray and Nairn Landscape Assessment as extending west/east across Moray, between the Spey and the Findhorn valleys, forming the transition between the uplands and coastal plain. To the south lies the Upland Moorland and Forestry (9) and to the north the low-lying Coastal Farmlands (4).

Due to the differences in context, character and scale of landscapes within the Rolling Farmland and Forests (5) character type, two sub-divisions have been identified for the purpose of this study:

- The 'Rolling Farmland and Forests with Valleys' (5a) which occurs between the Rafford valley and extends east to near Miltonduff, incorporating the upper Lossie and Pluscarden valleys.
- The 'Rolling Farmland and Forests with Low Hills' (5b) which occurs to the west, where
  extensive deposits have created undulating and hummocky terrain and there is a
  distinctive pattern of alternating forest and fields.

The eastern area of the Rolling Farmland and Forests between the Spey and Lossie valleys has been retained as character type 5 as it is closest in character to the original definition in the Moray and Nairn Landscape Assessment. This landscape forms a relatively narrow band of small rolling hills fringing the broader Upland Moorland and Forestry (9). The sensitivity assessment which follows is for this character type.

#### Existing/consented wind farm development

No operational wind turbines were noted within this character type during the site visit.

The operational Rothes wind farm is located in the adjacent Upland Moorland and Forest (9) character type and is visible in relative proximity from more open western parts of this character type. This development comprises 22 turbines, 100m high. An extension for 18 turbines, 125m high, has been consented to this wind farm.

#### Summary of capacity

This landscape forms gently rolling hill slopes fringing the higher Upland Moorland Forest (9) to the south and gradually merging with the flatter and more open Coastal Farmland (4) to the north. Pockets of more complex drumlin-like knolls and narrow valleys filled with small water bodies occur in places. Coniferous woodlands and shelterbelts are a strong feature and are interspersed with small pastures and larger arable fields towards the more gently undulating transition with the Coastal Farmland(4). This is a relatively well-settled area with many dispersed new houses, farms and small settlements. Distillery buildings are prominent features on the edge of some of these settlements.

The relatively small scale of the settled valleys, pockets of more complex interlocking landform and small water bodies and also the potential for cumulative impacts with nearby operational wind farm development, increase sensitivity within this landscape. There would be overall *High* 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).

### Cumulative issues

The operational Rothes wind farm is seen in relative proximity (4km) from the western edge of this character type. An 18 turbine extension to this wind farm has been consented. These turbines lie to the west of the original scheme and may additionally impact on views from parts of this character type. Key cumulative issues that may arise within the Rolling Farmland and Forests (5) are likely to include:

- The close inter-visibility between additional turbines located in the western parts of this character type and the operational Rothes wind farm where even the small typology (20-35m) would appear large in views from settlement and roads and could increase the visual clutter of turbines and also the transmission line which are prominent in views.
- 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 smaller scale landscape.
- 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.

#### **Constraints**

- The small scale rolling landform and well-settled character of this landscape which increases sensitivity to larger turbines
- More complex knolly landform, intimately scaled valleys with water bodies and prominent small 'stand-alone' hills
- Policy landscape features in the Blackhills area
- Potential cumulative effects with the Rothes wind farm development which is seen in close proximity particularly in the western parts of this landscape.

## **Opportunities**

 Broader and more even hill slopes on the fringes of the Upland Moorland and Forestry (9) where rising ground could form a backdrop reducing the prominence of smaller turbines.

#### **Guidance on development**

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

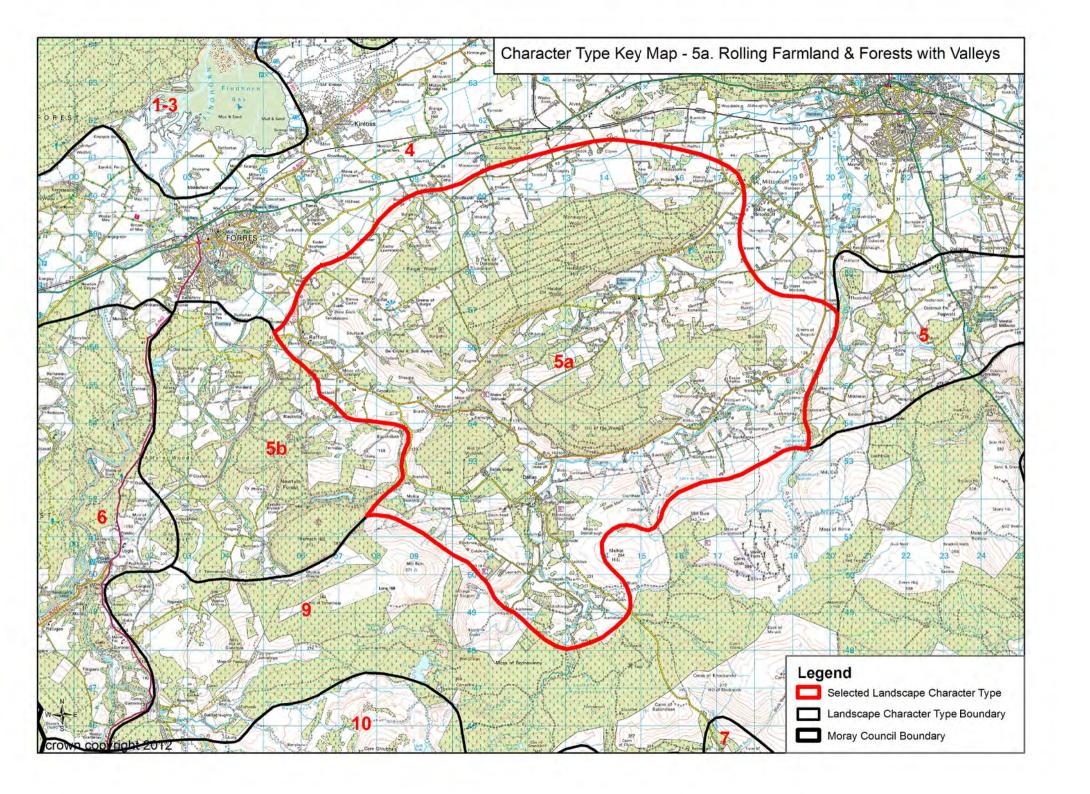
There is likely to be *limited* scope for the small-medium (35m - 50m) development typologies to be sited within this character type. Opportunities are limited to the more expansive and less well-settled gently graded upper hill slopes to the east of this character type where significant cumulative effects with the operational Rothes wind farm could be avoided. Turbines of this size could impact on the landmark hill of Brown Muir which forms a prominent backdrop to this character type and is seen extensively across the Coastal Farmland (4) and they should therefore be sited away from the more pronounced steeper slopes of this hill. Individual turbines are likely to be easier to accommodate than groups, and care should be taken to avoid intrusion on sensitive skylines by siting turbines so backdropped by rising ground. Turbines towards the lower height band of this typology would be

likely to be less visually prominent. The adjacent Upland Moorland and Forestry (9) character type 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 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 slopes, but like the small-medium typology, should avoid being sited in front of the steeper more prominent slopes of the landmark hill of Brown Muir and within or close-by more complex knolly landform. There is scope to relate this size of turbine with larger distillery buildings and within broader farmland at the transition with the Coastal Farmland (4). 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. They would also be likely to have fewer cumulative impacts where the operational Rothes wind farm is seen in relative proximity.

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



## **Character Type 5a: Rolling Farmland and Forests with Valleys**

#### Introduction

The Rolling Farmland and Forests (5) landscape character type is shown in the Moray and Nairn Landscape Assessment as extending west/east across Moray, between the Spey and the Findhorn valleys, forming the transition between the uplands and coastal plain. To the south lies the Upland Moorland and Forestry (9) and to the north the low-lying Coastal Farmlands (4).

Due to the differences in context, character and scale of landscapes within the Rolling Farmland and Forests (5) character type, two sub-divisions have been identified for the purpose of this study:

- The 'Rolling Farmland and Forests with Valleys' (5a) which occurs between the Rafford valley and extends east to near Miltonduff, incorporating the upper Lossie and Pluscarden valleys.
- The 'Rolling Farmland and Forests with Low Hills' (5b) which occurs to the west, where extensive deposits have created undulating and hummocky terrain and there is a distinctive pattern of alternating forest and fields.

The eastern area of the Rolling Farmland and Forests between the Spey and Lossie valleys has been retained as character type 5 as it is closest in character to the original definition in the Moray and Nairn Landscape Assessment. This landscape forms a relatively narrow band of small rolling hills fringing the broader Upland Moorland and Forestry (9).

This section of the report is the landscape sensitivity assessment which has been undertaken for the sub-type Rolling Farmland and Forests with Valleys (5a).

### Existing/consented wind farm development

No operational wind turbines were noted within this character type during the site visit. A consented 61m high turbine has been consented at Bognie Farm in the upper valley of Pluscarden.

The operational Rothes wind farm is located in the adjacent Upland Moorland and Forest (9) character type and is clearly visible from the valley of the upper Lossie in the Kellas/Dallas area. This development comprises 22 turbines, 100m high. An extension for 18 turbines, 125m high, has been consented to this wind farm.

## Summary of capacity

This landscape comprises two pronounced ridges separated by the valleys of the Upper Lossie and Pluscarden. The ridges feature steep south-facing scarp slopes and long gentle dip slopes to the north. The northern ridge is especially prominent in views from the Coastal Farmlands (4) to the north, although the distinctive rhythmic landform of this pair of ridges is appreciated in 'end-on' views from the 'Rolling Farmlands and Forest' (5) to the east. The valleys are more visually contained and feature open farmed flat floodplains which contrast with the often heavily wooded valley sides. Settlement is focussed within these valleys with small settlements, large estate houses and dispersed farms and houses often located on lower valley sides. Occasional historic and archaeological features, such as Pluscarden Abbey, form landmark features in this landscape. The Upper Lossie valley is generally more

open than the Pluscarden valley and it lies in close proximity to the operational Rothes wind farm sited within the adjacent 'Upland Moorland and Forestry' (9).

The relatively small scale of the settled valleys, the prominent backdrop provided by the ridges to surrounding landscapes and the presence of more complex or dramatic landform features, such as the steep scarp slopes increase sensitivity within this landscape. Visual sensitivity is increased by the prominence of the ridges but also the long views possible along the valleys. The potential for cumulative impacts with nearby operational wind farm development is also an additional constraint in the Lossie Valley. There would be an overall *High* sensitivity to both 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).

#### Cumulative issues

The Rothes wind farm is seen in relative proximity (3-4km) to the upper Lossie valley. An extension to this wind farm has been consented and this will increase the extent of turbines seen on the skyline above the Lossie valley. This wind farm is not visible from the more contained Pluscarden valley. Key cumulative issues that may arise within the Rolling Farmland and Forests with Valleys (5a) are likely to include:

- The close inter-visibility between additional turbines located in the upper Lossie valley and the operational Rothes wind farm where even the small typology (20-35m) would appear large from settlement and roads and could increase the visual clutter of turbines and also the transmission line already prominent from this valley.
- 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 smaller scale landscape.
- Inter-visibility between any wind turbines located on visually prominent ridge tops or upper slopes, where they would break the skyline and be seen together with the Rothes wind farm in longer views from the Coastal Farmland (4) and Rolling Farmland and Forest (5).
- 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.

#### **Constraints**

- The visual prominence of the ridges and Mulundy Hill the long northern ridge of Heldon Hill is particularly prominent, seen widely from settlement and roads from the Coastal Farmlands (4) from the north.
- The low relief of the northern ridge, where tall turbines could dominate their scale, and the strong containment and limited extent of the valleys.
- Steep wooded scarp slopes of the ridges and smaller scale complex knolls and terraces occurring on the southern edge of the upper Lossie.
- The open farmed floodplain which contrasts with the densely wooded ridges and enhances the scenic diversity of this landscape.
- The setting of historic houses, such as Kellas and Dallas Lodge and their designed landscapes, and the setting of the 'landmark' feature of Pluscarden Abbey and also occasional archaeological features.
- The well-settled nature of the valleys within this character type and the recreational use of Heldon Wood which increases visual sensitivity.

 Potential cumulative effects with the Rothes wind farm development which is seen in close proximity to the upper Lossie valley.

## **Opportunities**

 The more gently graded dip slopes of the ridges where rising ground could form a backdrop reducing the prominence of smaller turbines.

## **Guidance on development**

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

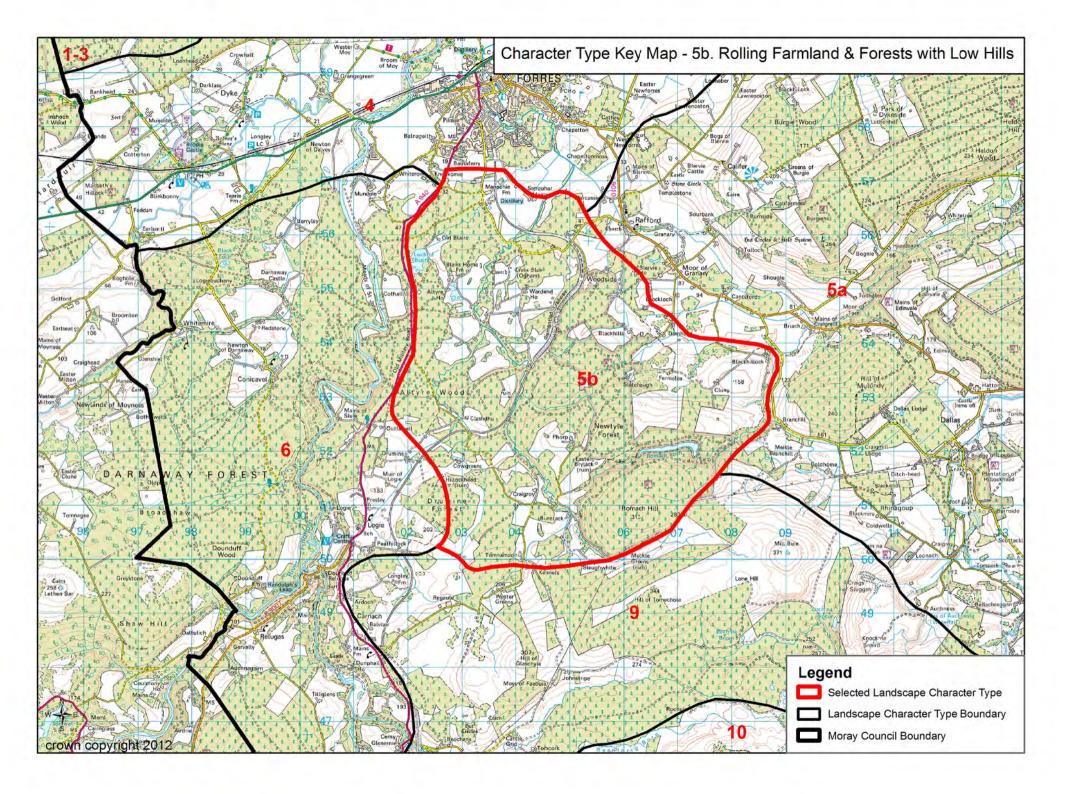
There is likely to be *limited* scope for the small-medium (35m - 50m) development typologies to be sited within this character type due to the adverse impacts likely to occur on the small scale and setting of settlement and historic buildings within the valleys, on views of the prominent ridges but also cumulative impacts with the operational Rothes wind farm located in the adjacent Upland Moorland and Forestry (9) character type. Opportunities are limited to the more expansive and less well-settled dip slopes of the ridges. Individual turbines are likely to be easier to accommodate than groups, and care should be taken to avoid intrusion on sensitive skylines by siting turbines so back-dropped by rising ground. Turbines towards the lower height band of this typology would be likely to be less visually prominent.

There is **some** scope for the small typology (20m –35m) to be accommodated in this landscape. Turbines of this size should also be located on gently graded dip slopes but could additionally be accommodated on the edges of pastures on valley sides which are often bordered by forest. Turbines should be set back from the open valley floor where they would be visually prominent in long views from roads and settlement but should avoid being set in front of the steep scarp slopes of the ridges. 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 areas of this landscape type and would be less visible due to their increased ability to be screened by landform and woodland.

Turbines sited in these areas should avoid cumulative effects with the Rothes wind farm located in the adjacent Upland Moorland and Forestry (9). The upper Lossie valley will be particularly sensitive in this respect and it is recommended that only turbines below 20m height should be used in this area, and situated close to existing buildings, where close views of this operational wind farm are possible. Turbines should be sited to avoid impacting on the setting of historic built features and archaeology.

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



# **Character Type 5b: Rolling Farmland and Forests with Low Hills**

#### Introduction

The Rolling Farmland and Forests (5) landscape character type extends west/east across Moray, between the Spey and the Findhorn valleys, forming the transition between the uplands and coastal plain. To the south lies the Upland Moorland and Forestry (9) and to the north the low-lying Coastal Farmlands (4).

Due to the differences in context, character and scale of landscapes within the Rolling Farmland and Forests (5) character type, two sub-divisions have been identified for the purpose of this study:

- The 'Rolling Farmland and Forests with Valleys' (5a) which occurs between the Rafford valley and extends east to near Miltonduff, incorporating the Kellas and Pluscarden valleys
- The 'Rolling Farmland and Forests with Low Hills' (5b) which occurs to the west, where extensive deposits have created undulating and hummocky terrain and there is a distinctive pattern of alternating forest and fields;

The eastern area of the Rolling Farmland and Forests between the Spey and Lossie valleys has been retained as character type 5 as it is closest in character to the original definition in the Moray and Nairn Landscape Assessment. This landscape forms a relatively narrow band of small rolling hills fringing the broader Upland Moorland and Forestry (9).

This section of the report is the landscape sensitivity assessment which has been undertaken for the sub-type Rolling Farmland and Forests with Low Hills (5b).

## Existing/consented wind farm development

No operational wind turbines were noted within this character type during the site visit.

#### Summary of capacity

Rolling Farmland and Forests with Low Hills (5b) extends across undulating deposits which create hummocky and free draining terrain, rising to low rounded hills, the highest of which is Romach Hill. The area forms a transition between the Upland Moorland and Forestry (9) and the town of Forres. It also forms the western edge of the Rolling Farmland and Forests with Valleys (5b), and the eastern edge of the narrow wooded valley (6), overlooking the forests and farmland of Logie and Darnaway. The hummocky terrain, the undulations and low rounded hills are well wooded, with pasture fields appearing to be carved out of the forest, creating a sequence of spaces which provide a well defined and consistent character. The enclosure and extensive woodland creates a secluded character.

Settlement is dispersed, with small farms, crofts and other houses are located at the edge of fields and woodland clearings, but there is a more extensive designed landscape at Altyre. The few roads are narrow and winding, although there is extensive access along forest tracks and farm roads. The Rolling Farmland and Forests with Low Hills (5a) character type is only partially settled and not extensively roaded. Views within the area are limited by landform and the woodland which forms extensive enclosure offering intermittent views of the opens spaces and limiting long views across the type. Romach Hill is a prominent landmark hill, and it can be widely seen from outwith the area, forming a foreground feature

to the more extensive neighbouring Upland Moorland and Forestry (9) when viewed from the north.

The low relief, small scale and occasionally interlocking pattern of the low hills and hummocky terrain, the frequent small summits, the intricate and consistent pattern of small open spaces set within enclosed woodland and the secluded character of the landscape are key sensitivities of this character type. This landscape therefore has a *High* sensitivity to both the large (80m-130m) and the medium (50m-80m) typologies, *High Medium* sensitivity to the small-medium (35m-50m) typology, which reflects the sensitivity to scale in this landscape, and *Medium* sensitivity for small (20-35m) typology, reflecting that there are likely to be more opportunities to accommodate smaller turbines which with careful siting are less likely to impact on the small scale and seclusion of the landscape character.

Turbines of less than 20m in height could readily be accommodated within the farmed areas of this landscape type.

#### Potential cumulative issues

There is some potential for cumulative landscape and visual effects to arise in the future with turbines located in adjacent character types, as the Upland Moorland and Forestry (9) has been identified as having some potential for wind turbines, including the large and medium typologies.

Romach Hill offers a useful visual buffer as it stands between the higher, but more extensive plateau of the Upland Moorland and Forestry (9) to the south and the low-lying and smaller scale landscapes of the Rolling Farmland and Forests with Low Hills (5a).

The farmed clearings which are likely to be the focus for the smaller typologies identified as being the most appropriate for this landscape type are dispersed and not easily inter-visible, which is likely to minimise potential for simultaneous cumulative visual impacts. The effects of turbines on sequential visual impacts when travelling through the landscape from space to space should be carefully monitored. Care should be taken to develop a careful and consistent approach to turbine style and siting to avoid negative impacts on landscape character. This will also mitigate against visual clutter in smaller spaces where settlement is concentrated in smaller spaces.

Well-sited turbines of less than 20m and a consistent relationship between these small turbines and the farm cluster are likely to further minimise potential cumulative impacts. Small turbines are also more readily visually screened by topography and woodland, which is likely to limit their cumulative visual impact.

Key cumulative issues that may arise within the Rolling Farmland and Forests with Low Hills (5b) are likely to include:

- Variations in the type and size of single and small groups of small turbines proposed within the landscape type;
- Visual confusion and an absence of rationale which could occur between large turbines sited in less settled simple and more expansive upland areas and the same size of turbines also sited within this smaller scale landscape;

- Visual clutter created by an inconsistent relationship with other elements in this relatively well structured landscape;
- Sequential visual impacts experienced when travelling through the landscape

#### **Constraints**

- The small scale of the landscape low relief, small landforms and hummocky terrain characteristic of much of this landscape
- The tops of the low rounded hills where turbines would form prominent features if sited on them;
- The small scale of the fields and clearings within the forest, surrounded by trees, the enclosure reinforcing a sense of intimacy and discovery when travelling from space to space
- The centre of the open spaces and clearings in the woodland, where turbines will be more likely to be visually prominent and become the focal point of views into the spaces
- The sense of seclusion reinforced by the degree of enclosure and extent of the woodland
- The widespread visibility and prominence of Romach Hill, and its strategic role in separating the small scale low-lying terrain from the more extensive uplands
- The setting of individual buildings, within the irregular clearings which appear to have been carved out of the forest:
- The setting of Altyre Estate, its built features, waterbodies and its designed policies;
- The deep trough of Romach Loch and its setting.

#### **Opportunities**

- The more gently graded lower slopes of Romach Hill, which forms a larger scale setting for the turbines;
- The edges of clearings, next to farm buildings, which create 'clusters' of development;
- Larger stretches of moor or open fields, especially when back-dropped by higher land or the adjacent Upland Moorland and Forestry (9) landscape type

#### **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 likely to be *limited* scope for the small-medium (35m - 50m) development typologies to be sited within this character type due to the adverse impacts likely to occur on the small scale landscape and the sense of seclusion. Scope is limited to the larger spaces associated with more extensive fields or moorland, associated with the transition with the Upland Moorland and Forestry (9) or the lower fringes of Romach Hill. Individual turbines are likely to be easier to accommodate than groups, and care should be taken to avoid cumulative effects with turbines on adjacent upland character types.

There are some opportunities for the small typology (20m – 35m) to be located on gently graded slopes and the edges of farmland within the Rolling Farmland and Forests with Low Hills (5b). Individual turbines are likely to be easier to accommodate than groups, which should be limited to no more than three turbines. Turbines sited in these areas should avoid

intruding into the centre of the open spaces, the setting of key features and the summits of low hills.

Well sited turbines of less than 20m could be sited to reflect the scattered settlement pattern, and would fit in well with the scale of this landscape.

All turbines should be located to avoid impacts on the settings of, and views from and to, features and sites of historical or archaeological interest. Micro siting should follow the guidance set out in Section 5 of this report.