

# Appendix 1-4

## Scoping Checklist

## SCOPING CHECKLIST

No.	Questions to be considered in scoping	Yes/No/?	Which Characteristics of the Project Environment could be affected and how?	Is the effect likely to be significant? Why?
<b>1. Will construction, operation or decommissioning of the Project involve actions which will cause physical changes in the locality (topography, land use , changes in waterbodies, etc)</b>				
1.1	Permanent or temporary change in land use, landcover or topography including increases in intensity of land use?	Yes	Will result in partial loss of on-site forestry resource	Unlikely -on-site forestry resource is a managed conifer plantation - loss is of marginal environmental value. Confirm effect by assessment
1.2	Clearance of existing land, vegetation and buildings?	Yes	Will result in partial loss of on-site ecological habitats	Possibly – areas of valuable ecological habitats exist on-site. Confirm effect by assessment
			Will require partial loss of on-site forestry resource to accommodate development infrastructure which could affect economic	Unlikely - on-site forestry resource is a managed conifer plantation - loss is of marginal environmental value
			Loss of on-site forestry habitat could affect bat populations if present	Possibly – protected species. Confirm effect by assessment
			Could damage or remove historic relics if present	Possibly – no recorded or known cultural heritage features present on-site. Confirm effect by assessment
1.3	Creation of new land uses?	Yes	Partial change of existing on-site forestry resource to wind energy generating activity	Unlikely – on-site forestry resource is a managed conifer plantation - loss is of marginal environmental value. Confirm effect by assessment
			The new landuse could affect local landscape character	Possibly - landscape with high sensitivity and value rating in proximity. Confirm effect by assessment
1.4	Pre-construction investigations eg boreholes, soil testing?	Yes	Ground investigation consisting of boreholes and further trial pits will be carried out at each turbine location to inform the detailed crane hardstanding and turbine foundation design.	No – localised effect

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1.5	Construction works?	Yes	Partial loss of on-site ecological habitat to accommodate infrastructure	Possibly – areas of valuable ecological habitats exist on-site. Confirm effect by assessment
		Yes	Partial loss of on-site forestry resource to accommodate infrastructure	Unlikely -on-site forestry resource is a managed conifer plantation - loss is of marginal environmental value. Confirm effect by assessment
1.6	Demolition works?	No	n/a	n/a
1.7	Temporary sites used for construction works or housing of construction workers	Yes	Partial loss of on-site ecological habitat to accommodate temporary construction phase compound	Possibly – areas of valuable ecological habitats exist on-site. Confirm effect by assessment
1.8	Above ground buildings, structures or earthworks, including linear structures, cut and fill or excavations?	Yes	Partial loss of existing on-site ecological habitat to accommodate the new substation building and turbines, new roadways etc	Possibly – areas of valuable ecological habitats exist on-site Confirm effect by assessment
			Potential for visual effects due to height of turbine structures	Possibly - landscape with high sensitivity and value rating. Confirm effect by assessment
			Potential for effects on avian population –collision or strike with turbines	Possibly - SPA within circa 6km. Confirm effect by assessment
1.9	Underground works including mining or tunnelling?	Yes	Underground cabling within forestry	Possibly – stream crossings required Confirm effect by assessment
1.10	Reclamation works?	No	n/a	n/a
1.11	Dredging?	No	n/a	n/a
1.12	Coastal structures eg seawalls, piers?	No	n/a	n/a
1.13	Offshore structures?	No	n/a	n/a
1.14	Production and manufacturing processes?	No	n/a	n/a
1.15	Facilities for storages of goods or materials?	Yes	Water quality impacts could occur from run-off from temporary on-site storage of construction materials and fuel	Unlikely– materials and fuels will be stored in designated areas which can be suitably protected by appropriate run-off containment and drainage control system. Confirm effect by assessment
1.16	Facilities for treatment or disposal of solid wastes or liquid effluents	No	n/a	n/a
1.17	Facilities for long term housing of operational workers?	No	n/a	n/a
1.18	New road, rail or sea traffic during construction or	Yes	Will increase HGV traffic on local and regional road	Unlikely-temporary short term

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	operation?		networks	increase. Traffic management plan could address potential nuisance. Confirm effect by assessment
1.19	New road, rails, air, waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?	Yes	New access road is to be constructed within site and will require a new watercourse crossing. Potential for water quality impact	Possibly – risk of water quality impact during construction. Confirm effect by assessment
1.20	Closure or diversion or existing transport routes or infrastructure leading to changes in traffic movements?	Yes	Possible temporary diversions for works along section of local road and for delivery of turbine components	Unlikely-temporary short term effect. Traffic management plan could address potential nuisance. Confirm effect by assessment
1.21	New or diverted transmission lines or pipelines?	Yes	Diversion of 38kv line and new loop in infrastructure to existing 110kv system.	Unlikely but assessment required.
1.22	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers	Yes	Some on-site culverting and modification to drainage regime could be required resulting in changes to existing hydrology regime which could impact on-site ecological resources	Unlikely – engineered drainage and run-off control system is to be implemented which will ensure minimal changes to existing on-site drainage regime. However potential exists. Confirm effect by assessment
1.23	Stream crossings?	Yes	Connection route to permitted Lenala substation will require crossing of main water course and some smaller on-site streams.	Unlikely Suitably engineered clear span bridge and appropriate best practice construction methods could achieve no negative impact. However potential exists. Confirm effect by assessment
1.24	Abstractions or transfers of water from ground or surface waters?	No	n/a	n/a
1.25	Changes in waterbodies or the land surface affecting drainage or run-off?	Yes	Project infrastructure will increase the area of impermeable land on-site. Potential for indirect effect to on-site ecological habitats	Unlikely Project includes engineered drainage and run-off control system which will ensure minimal changes to existing on-site drainage regime Confirm effect by assessment
1.26	Transport of personnel or materials for construction, operation or decommissioning?	Yes	Major increase in development generated HGV traffic during construction on local road infrastructure	Unlikely – short term temporary activity. Confirm effect by assessment
1.27	Long term dismantling or decommissioning or restoration works?	No	n/a	n/a

No.	Questions to be considered in scoping	Yes/No/?	Which Characteristics of the Project Environment could be affected and how?	Is the effect likely to be significant? Why?
1.28	Ongoing activity during decommissioning which could have an impact on the environment?	No	n/a	n/a
1.29	Influx of people to an area either temporarily or permanently?	No	n/a	n/a
1.30	Introduction of alien species?	No	n/a	n/a
1.31	Loss of native species or genetic diversity	?	Partial loss of on-site ecological habitat to accommodate development could affect associated habitat dependant species	Possibly – areas of valuable ecological habitats exist on-site. Confirm effect by assessment
1.32	Any other actions?	No	n/a	n/a
<b>2. Will construction or operation of the Project use natural resources such as land, water materials or energy, especially any resources which are non-renewable or in short supply?</b>				
2.1	Land especially undeveloped or agricultural land?	Yes	Existing site supports agricultural and forestry	No – marginal value
2.2	Water?	Yes	Water for construction phase	No – short term temporary requirement
2.3	Minerals?	No	n/a	n/a
2.4	Aggregate?	Yes	Project construction will use large amount of imported stone and aggregate material	No – will be sourced from operating registered quarries. Unlikely to affect overall regional resources
2.5	Forests or timber?	Yes	Development within forestry	on-site forestry resource is a managed conifer plantation - loss is of marginal environmental value
2.6	Energy including electricity and fuels?	Yes	Fuels required for construction vehicles and plant	No – short term temporary activity
2.7	Any other resources?	n/a	n/a	n/a
<b>3. Will the Project involve use, storage, transport, handling or production of substances or materials which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health?</b>				
3.1	Will the project involve use of substances or materials which are hazardous or toxic to human health or the environment (flora, fauna, water supplies)?	Yes	Concrete and fuels will be used during construction. Risk to water quality if uncontrolled spills occur	Unlikely- materials and fuels will be stored in designated areas which can be suitably protected by appropriate run-off containment and drainage control system. Confirm effect by assessment
3.2	Will the project result in changes in occurrence of diseases vectors (eg insect or water borne diseases)?	No	n/a	n/a
3.3	Will the project affect the welfare of people eg by changing living conditions?	?	Perceived risk of impacts to amenity due to noise, shadow flicker and visual impact	? - Nearest residential receptors >1km from infrastructure. Confirm

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				effect by assessment
3.4	Are there especially vulnerable groups of people who could be affected by the project eg hospital patients, the elderly?	No	n/a	n/a
3.5	Any other causes?	Yes	On site substation could be perceived locally as safety risk	Unlikely– substation compound will be secure from public access.
<b>4. Will the Project produce solid wastes during construction, operation or decommissioning?</b>				
4.1	Spoil, overburden or mine wastes?	Yes	Construction will generate large volume of excavated spoil and overburden requiring disposal	No - all excavated material will be used on site for fill and landscaping
4.2	Municipal waste (household and or commercial wastes)?	Yes	Construction personnel will generate some domestic waste requiring disposal to landfill	No - very limited volume
4.3	Hazardous or toxic wastes (including radioactive wastes)?	No	n/a	n/a
4.4	Other industrial process wastes?	No	n/a	n/a
4.5	Surplus product?	No	n/a	n/a
4.6	Sewage sludge or other sludges from effluent treatment?	No	n/a	n/a
4.7	Construction or demolition wastes?	Yes	Construction will generate inert soils and sub soils requiring disposal	No – all excavated material will be used on site for fill and landscaping
4.8	Redundant machinery or equipment?	Yes	Turbines have a operation life of typically 30-35 years	Unknown – Confirm effect by assessment
4.9	Contaminated soils or other materials?	No	n/a	n/a
4.10	Agricultural wastes?	No	n/a	n/a
4.11	Any other solid wastes?	Yes	Construction will generate surplus peat soils requiring disposal	No – surplus peat soils will be stored on site to facilitate habitat restoration
<b>5. Will the Project release pollutants or any hazardous, toxic or noxious substances to air?</b>				
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources?	No	n/a	n/a
5.2	Emissions from production processes?	No	n/a	n/a
5.3	Emissions from materials handling including storage or transport?	No	n/a	n/a
5.4	Emissions from construction activities including plant and equipment?	Yes	Construction vehicles and plant will generate minor emissions to the atmosphere	Unlikely – short temporary duration. Confirm effect by assessment
5.5	Dust or odours from handling of materials including construction materials, sewage and waste?	Yes	Excavation activities will generate particulate emission to the atmosphere	Unlikely– short temporary duration – localise effect. Confirm effect by assessment
5.6	Emissions from incineration of wastes?	No	n/a	n/a
5.7	Emissions from burning of waste in open air (eg slash materials, construction debris)?	No	n/a	n/a

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5.8	Emissions from any other sources?	No	n/a	n/a
<b>6. Will the Project cause noise and vibrations or release of light, heat energy or electromagnetic radiation?</b>				
6.1	From operation of equipment eg engines, ventilation, crushers?	Yes	Construction vehicles and plant will generate noise	Unlikely– short temporary duration. Confirm effect by assessment.
6.2	From industrial or similar processes?	Yes	Wind turbines during operation are a source of noise	Unlikely - distance to nearest sensitive residential receptors circa 1km Confirm effect by assessment
6.3	From construction or demolition?	Yes	Excavation activities during construction are a potential noise source	Unlikely - distance to nearest sensitive residential receptors circa 1km Confirm effect by assessment
6.4	From blasting or piling?	Yes	Blasting may be required for winning of on-site aggregate materials. Turbine foundations may be piled	Unknown - Confirm effect by assessment
6.5	From construction or operational traffic?	Yes	Construction vehicles and plant will generate minor emissions to the atmosphere	Unlikely- short temporary duration Confirm effect by assessment
6.6	From lighting or cooling systems?	No	n/a	n/a
6.7	From sources of electromagnetic radiation (consider effects on nearby sensitive equipment as well as people)?	Yes	Proposed new On site substation	Unlikely - distance to nearest sensitive residential receptors circa 1km Confirm effect by assessment
6.8	From any other sources?	No	n/a	n/a
<b>7. Will the Project lead to risk of contamination of land or water from releases of pollutants onto the ground or into sewers, surface water, groundwater, coastal waters or the sea?</b>				
7.1	From handling, storage, use or spillage of hazardous substances or toxic materials?	Yes	Risk to water quality during construction phase from any uncontrolled fuel spills, concrete use etc	Unlikely – materials and fuels will be stored in designated areas which can be suitably protected by appropriate run-off containment and drainage control system. Designated suitability bunded concrete wash out area also provided. Confirm effect by assessment
7.2	From discharge of sewage or other effluents (whether treated or untreated) to water or land?	No	n/a	n/a
7.3	By deposition of pollutants emitted to air, onto the land or into water?	No	n/a	n/a
7.4	From any other sources?	No	n/a	n/a
7.5	Is there a risk of long term build up of pollutants in the	No	n/a	n/a

No.	Questions to be considered in scoping	Yes/No/?	Which Characteristics of the Project Environment could be affected and how?	Is the effect likely to be significant? Why?
	environment from these sources?			
<b>8. Will there be any risk of accidents during construction or operation of the Project which could affect human health or the environment?</b>				
8.1	From explosion, spillages, fires etc from storage, handling, use or production or toxic substances?	No	n/a	n/a
8.2	From events beyond the limits of normal environmental protection eg failure of pollution control systems?	No	n/a	n/a
8.3	From any other causes?	No	n/a	n/a
8.4	Could the project be affected by natural disasters causing environmental damage (eg floods, earthquakes, landslip, etc)?	Yes	Development lands contain peat and bog soils and subsoils	Unlikely – Final wind farm infrastructure will be sited to eliminate risk. Peat Study required.
<b>9. Will the Project result in social changes, for example, in demography, traditional lifestyles, employment?</b>				
9.1	Changes in population size, age, structure, social groups etc?	No	n/a	n/a
9.2	By resettlement of people or demolition of homes or communities or community facilities eg schools, hospitals, social facilities?	No	n/a	n/a
9.3	Through in-migration of new residents or creation of new communities?	No	n/a	n/a
9.4	By placing increased demands on local facilities or services eg housing, education, health?	No	n/a	n/a
9.5	By creating jobs during construction or operation or causing the loss of jobs with effects on unemployment and the economy?	Yes	Employment to be created during construction likely to be met locally with some employment opportunities during operation	Yes – would benefit local economy
9.6	Any other causes?	No	n/a	n/a
<b>Question – Are there any other factors which should be considered such as consequential development which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality?</b>				
9.1	Will the project lead to pressure for consequential development which could have significant impact on the environment eg more housing, new roads, new supporting industries or utilities, etc?	No	n/a	n/a
9.2	Will the project lead to development of supporting facilities, ancillary development or development stimulated by the project which could have impact on the environment eg: <ul style="list-style-type: none"> <li>▪ Supporting infrastructure (roads, power supply, waste or wastewater treatment, etc)</li> </ul>	No	n/a	n/a



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	<ul style="list-style-type: none"> <li>▪ Housing development</li> <li>▪ Extractive industries</li> <li>▪ Other?</li> </ul>			
9.3	Will the project lead to after-use of the site which could have an impact on the environment?	No	n/a	n/a
9.4	Will the project set a precedent for later developments?	No	Area currently zoned for type of development proposed. Each project assessed on its own merits	n/a
9.5	Will the project have cumulative effects due to proximity to other existing or planned projects with similar effects?	Yes	A number of permitted neighbouring windfarms. Potential for cumulative traffic and visual effects.	Probably - landscape with high sensitivity and value rating. Confirm effect by assessment