

**Gerald McTiernan**

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**From:** Saeed Khan <Saeed.Khan@rpsgroup.com>  
**Sent:** 13 July 2015 10:42  
**To:** Robert Ovington - (DECLG); Jim Gannon  
**Cc:** Niall Cussen - (DECLG); Gabrielle McKeown - (DECLG); Brian Carroll .T (Renewable Energy)  
**Subject:** RE: 3.5x model  
**Attachments:** Memo Table Wind Scenarios 13\_07\_2015\_5sqkm Lakes R01.pdf

Hi Rob,  
Please find attached the results from the model with the 3.5 x height applied to mm1 (Mountain Moorland and hills > 150) and the fp (Flat peat land) classes.

Please contact me if you have any query.

Regards,  
Saeed

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**From:** Robert Ovington - (DECLG) [<mailto:Robert.Ovington@environ.ie>]  
**Sent:** 11 July 2015 13:01  
**To:** Saeed Khan; Jim Gannon  
**Cc:** Niall Cussen - (DECLG); Gabrielle McKeown - (DECLG); [Brian.Carroll@dcenr.gov.ie](mailto:Brian.Carroll@dcenr.gov.ie)  
**Subject:** 3.5x model

Hi Saeed,

Niall has asked they you apply a multiplier of 3.5 x height to the MM1 (Mountain Moorland and hills > 150m) and the FP (Flat Peat) land classes. These were 4x in the last model.

Please do not include the noise model.

Can you please give us an estimate for completion time on this?

After something you mentioned earlier about licence levels I can drop out Monday and provide a temporary ArcGIS advanced licence and a spatial analyst licence if it would expedite this or if it would prevent you having to bump someone off the licence manager. Let me know if this would assist.

Regards  
Rob

Robert Ovington  
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Table - Details of the land cover classes (Memorandum dated 29/04/2015) and the model calculation

Location	Spatial extent (scale)	Height	Setback from sensitive properties (residences, schools)	Remaining Area (km <sup>2</sup> ) following removal of areas with mean wind speed below minimum threshold, and exclusion of agreed no-go areas	Percent of ROI land Area	Capacity available (MW)	Assumed % delivery rate	Assumed MW delivered
Mountain Moorland and hills	> 150m	Existing guidelines Any height	New 150m					
	< 150m	Tend towards large	30 turbines maximum	449.25	0.64%	4,492.50	15.00%	673.88
Transitional marginal land		Medium	125m	47.67	0.07%	476.70	15.00%	71.51
	Ridges and hilltops preferred	Medium and short	125m					
Flat farm land		Medium	125m	0.33	0.00%	3.30	15.00%	0.50
		Tend towards small	10	56.69	0.08%	566.90	15.00%	85.04
Flat peat land		Tall	170m					
		Large	50 turbines maximum	387.67	0.55%	3,876.70	30.00%	1,163.01
Urban/Industrial	Urban town & villages	Short	100m					
	Industrial	Short	100m	0.00	0.00%	0.00	15.00%	0.00
Lakeside		Short	100m	0.00	0.00%	0.00	15.00%	0.00
		Tend towards small	10					
Coastal		Tall may be acceptable	100m	0.00	0.00%	0.00	15.00%	0.00
	Set back from water	Tend towards small	10					
				941.61	0.00%	9,416.10	15.00%	1,993.92

Republic of Ireland Land Area (km <sup>2</sup> )	70,273
Capacity Intensity (MW per km <sup>2</sup> )	10