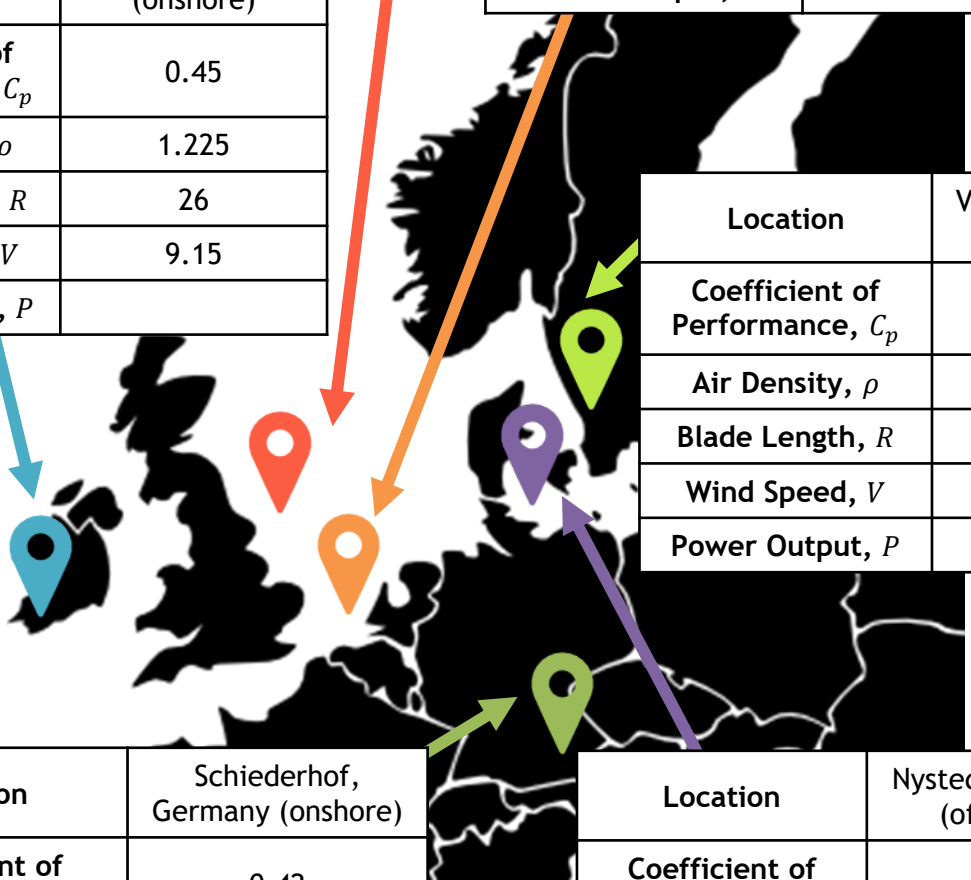
Substitution: Wind Turbine Investigation 1

$$P = 0.5C_p\rho\pi R^2V^3$$

Location	Hornsea 1, UK (offshore)
Coefficient of Performance, C_p	0.45
Air Density, ρ	1.225
Blade Length, R	72
Wind Speed, V	9.96
Power Output, P	4,435,182.425

Location	Hollandse Kust Zuid, Netherlands (offshore)
Coefficient of Performance, C_p	0.45
Air Density, ρ	1.225
Blade Length, R	100
Wind Speed, V	9.33
Power Output, P	

Location	Gneeves, Ireland (onshore)
Coefficient of Performance, C_p	0.45
Air Density, ρ	1.225
Blade Length, R	26
Wind Speed, V	9.15
Power Output, P	



Location	Väby, Sweden (onshore)
Coefficient of Performance, C_p	0.44
Air Density, ρ	1.225
Blade Length, R	45
Wind Speed, V	7.56
Power Output, P	

Location	Schiederhof, Germany (onshore)
Coefficient of Performance, C_p	0.42
Air Density, ρ	1.225
Blade Length, R	68
Wind Speed, V	6.16
Power Output, P	

Location	Nysted, Denmark (offshore)
Coefficient of Performance, C_p	0.46
Air Density, ρ	1.225
Blade Length, R	41
Wind Speed, V	9.65
Power Output, P	