APPENDIX 16.1 Table of Calculation Assumptions

N.B. references for the assumptions detailed below are either given in the relevant section of the technical report or the relevant spreadsheet in the carbon calculator.

Emissions Due to Turbine Life	Energy cost of manufacture, commissioning, operation and decommissioning have been scaled from independent assessments made by Risøe National Laboratory.
Loss of CO_2 Fixing Potential	Bog plants are lost from 100% of the area where peat is removed for construction.
	Bog plants are lost from 100% of the area where peat is drained (10 m expected average extent of drainage).
	The recovery of carbon accumulation by plants on restoration of land is as given in inputs.
Loss of CO_2 in Removed Peat	100% of the carbon contained in the removed peat is lost as CO_2.
	All depth recordings are in peat.
	Borrow pits will all be used to their maximum extent.
	Infrastructure dimensions include working areas.
	No benefits from micrositing to further minimise the impact on peat has taken place.
Loss of CO_2 in Drained Peat	The terrain is relatively flat with no drainage channels or furrows.
	The period of flooding is taken to be 178 days yr-1 for acid bogs based on the monthly mean temperature and the lengths of inundation (IPCC, 1997, Revised 1996 IPCC guidelines for national greenhouse gas inventories, Vol 3, table 5-13).
	The CH_4 emission rate provided for acid bogs is 11 (1-38) mg CH_4-C m-2 day-1 x 365 days (Aselmann & Crutzen ,1989. J.Atm.Chem. 8, 307-358).
	A 10 m expected average extent of drainage informed by the hydrology specialist.
	Depth of peat affected due to drainage is equal to the depth of peat removed.
	Site specific emission factors have been calculated using site specific survey data.
Loss of CO_2 in Drained Peat	The hydrology of the site will be fully restored upon decommissioning.
	The habitat of the site will be fully restored upon decommissioning.
Loss of CO_2 due to DOC and POC loss	In the long term, 100% of leached DOC and POC is assumed to be lost as CO_2.
Carbon Gain due to Site Improvement	The water table depth in borrow pits after restoration can be managed back to 0.05 m.
	Drainage around foundations and hardstandings will be restored.
	Assumed that the expected time required for regeneration of bog plants after restoration is 10 years.