

Total (Tonnes)		Years 1988- 2019		Average annual production												
9,222,879		31		297,512												
Specific Volumes																
YEAR	Tonnes	Carbon from extraction tC/yr	Carbon from extraction tCO2/yr	Extraction Area (ha)	Carbon from bare peat surface tC/yr	Carbon from bare peat surface tCO2/yr	Total Length of Drains	Total area of Drains (ha)	Carbon from open drains tCO2/yr	Carbon from Surfacewater run off (POC and DOC) tCO2/yr	Direct CH4 from surface tCO2 eq/yr	N2O Direct from surface tCO2eq/yr	Fuel Usage tCO2eq/yr	Total tCO2/yr	Total tCO2/yr	
Jul - Dec 1988	176,747	40,012	146,844	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	468.4	172,677		
1989	353,493	80,024	293,687	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	936.8	319,988		
1990	353,493	80,024	293,687	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	936.8	319,988		
1991	353,493	80,024	293,687	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	936.8	319,988		
1992	196,266	44,431	163,061	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	520.1	188,945		
1993	645,731	146,181	536,483	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	1,711.2	563,558		
1994	291,430	65,974	242,124	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	772.3	268,261		
1995	600,739	135,995	499,103	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	1,592.0	526,059		
1996	386,862	87,578	321,411	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	1,025.2	347,800		
1997	167,239	37,860	138,945	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	443.2	164,752		
1998	134,561	30,462	111,795	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	356.6	137,516		
1999	395,820	89,606	328,853	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	1,048.9	355,266		
2000	355,023	80,370	294,958	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	940.8	321,264		
2001	361,257	81,781	300,138	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	957.3	326,459		
2002	124,952	28,287	103,812	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	331.1	129,508		
2003	329,375	74,564	273,650	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	872.8	299,887		
2004	348,936	78,992	289,901	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	924.7	316,190		
2005	312,112	70,656	259,307	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	827.1	285,499		
2006	282,405	63,931	234,626	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	748.4	260,739		
2007	241,904	54,762	200,977	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	641.0	226,983		
2008	253,686	57,429	210,766	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	672.3	236,803		
2009	171,506	38,826	142,490	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	454.5	168,309		
2010	375,757	85,064	312,184	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	995.8	338,545		
2011	265,415	60,085	220,511	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	703.3	246,578		
2012	151,635	34,327	125,981	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	401.8	151,747		
2013	437,822	99,114	363,749	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	1,160.2	390,274		
2014	269,654	61,044	224,032	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	714.6	250,112		
2015	179,391	40,611	149,041	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	475.4	174,881		
2016	154,839	35,052	128,643	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	410.3	154,417		
2017	199,266	45,110	165,553	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	528.1	191,446		
2018	268,062	60,684	222,710	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	710.4	248,785		
2019	84,008	19,018	69,795	1923	3,374	12,384	850	85.0	57.8	11,807	384.6	730.7	222.6	95,382	8,498,606	1988 to 2019
Total Carbon			7,662,503			396,292			1,850	377,831	12,307	23,384	24,441	8,498,606		1988 to 2019

Extraction Area estimate	
Derryadd	559
Derryaroge	745
Lough Bannow	619

Notes:	
1 Average moisture content of 53.8% and carbon content of 49%	
2 Assume once brought into production that carbon emits from the surface for the entire period (i.e even if production ceases and revegetation occurs)	
3 850 km of drains for Derryadd, Derryaroge and Lough Bannow - assume ratio is 0.422km per ha of production area	
4 Assume drains are 1m wide	0.442
5 Combining the values for DOC and POC (= 6.14 tCO2-eq ha-1 yr-1)	
6 CH4 from surface eq	6.14
7 N2O Direct emissions from surface	0.2 tCO2eq/yr
8 Average Production during 2016 to 2018 was 231,35	0.38 tCO2eq/yr
9 1 Litre of Diesel results in 0.00265 tonnes of CO2 Emissions	Ratio of 0.00265 tCO2/ton of peat