

# Export Factor Analysis

Technology Type	Export Factor (%)
Wind	3.9
Micro CHP	4.6
PV	5.2
All	4.7

Table 1.1

Wind - Export Factor 3.9%									
Ref No.	Generation Capacity (kW)	Actual Export (kWh)	Individual Export Factor (%)	Technology Specific EAC (kWh)	% Difference	Error (kWh)	Non-Technology Specific EAC (kWh)	% Error (kWh)	
1	20	1420.92	0.81	6832.80	380.87	5411.88	8234.40	479.51	6813.48
2	20	9636.12	5.50	6832.80	-29.09	-2803.32	8234.40	-14.55	-1401.72
3	5	3625.77	8.28	1708.20	-52.89	-1917.57	2058.60	-43.22	-1567.17
4	2.5	1585.24	7.24	854.10	-46.12	-731.14	1029.30	-35.07	-555.94
Micro CHP - Export Factor 4.6%									
5	1	572.05	1.31	402.96	-29.56	-169.09	411.72	-28.03	-160.33
6	1	823.00	1.88	402.96	-51.04	-420.04	411.72	-49.97	-411.28
7	1	842.31	9.62	402.96	-52.16	-439.35	411.72	-51.12	-430.59
8	1	65.64	0.75	402.96	513.87	337.32	411.72	527.21	346.08
9	1	557.75	6.37	402.96	-27.75	-154.79	411.72	-26.18	-146.03
10	1	469.15	5.36	402.96	-14.11	-66.19	411.72	-12.24	-57.43
11	1	210.14	2.40	402.96	91.76	192.82	411.72	95.93	201.58
12	1	477.72	5.45	402.96	-15.65	-74.76	411.72	-13.82	-66.00
13	1	473.51	5.41	402.96	-14.90	-70.55	411.72	-13.05	-61.79
14	1	0.00	0.00	402.96 N/A		402.96	411.72 N/A		411.72
15	1	281.15	3.21	402.96	43.32	121.81	411.72	46.44	130.57
16	1	128.43	1.47	402.96	213.76	274.53	411.72	220.58	283.29
17	1	175.52	2.00	402.96	129.58	227.44	411.72	134.57	236.20
18	1	473.94	5.41	402.96	-14.98	-70.98	411.72	-13.13	-62.22
19	1	350.42	4.00	402.96	14.99	52.54	411.72	17.49	61.30
20	1	425.97	4.86	402.96	-5.40	-23.01	411.72	-3.35	-14.25
21	1	734.92	8.39	402.96	-45.17	-331.96	411.72	-43.98	-323.20
22	1	282.06	3.22	402.96	42.86	120.90	411.72	45.97	129.66
23	1	380.23	4.34	402.96	5.98	22.73	411.72	8.28	31.49
PV - Export Factor 5.2%									
24	4.92	2057.52	4.77	2241.16	8.93	183.64	2025.66	-1.55	-31.86
25	2.88	1112.42	4.41	1311.90	17.93	199.48	1185.75	6.59	73.34
26	2.52	1934.27	8.76	1147.91	-40.65	-786.36	1037.53	-46.36	-896.73
27	2.28	776.18	3.89	1038.59	33.81	262.40	938.72	20.94	162.54
28	2.23	682.00	3.49	1015.81	48.95	333.81	918.14	34.62	236.14
29	2	12.22	0.07	911.04	7353.10	898.82	823.44	6636.45	811.22
30	2	825.53	4.71	911.04	10.36	85.51	823.44	-0.25	-2.09
31	1.92	466.32	2.77	874.60	87.55	408.28	790.50	69.52	324.18
32	1.68	2067.97	14.05	765.27	-62.99	-1302.70	691.69	-66.55	-1376.28
33	1.44	1318.97	10.46	655.95	-50.27	-663.02	592.88	-55.05	-726.09
34	1.2	293.29	2.79	546.62	86.38	253.34	494.06	68.46	200.78
35	1.2	831.03	7.91	546.62	-34.22	-284.41	494.06	-40.55	-336.97
36	0.96	266.39	3.17	437.30	64.16	170.91	395.25	48.37	128.86
37	0.96	198.44	2.36	437.30	120.37	238.86	395.25	99.18	196.81
38	0.9	278.21	3.53	409.97	47.36	131.75	370.55	33.19	92.33

Table 1.2

Total Gross Error Comparison				
Technology Type	Gross Error Generation Specific Export Factor (kWh)	Gross Error Non-Generation Specific Export Factor (kWh)	Specific Per Site (kWh)	Non-Specific Per Site (kWh)
Wind	10863.91	10338.31	2715.98	2584.58
Micro CHP	3573.77	3565.01	188.09	187.63
PV	6203.28	5596.23	413.55	373.08
TOTAL	20640.97	19499.56	543.18	513.15

Table 1.3

Total Net Error Comparison				
Technology Type	Net Error Generation Specific Export Factor (kWh)	Net Error Non-Generation Specific Export Factor (kWh)	Net Error Per Site - Specific EF (kWh)	Net Error Per Site - Non-Specific EF (kWh)
Wind	-40.15	3288.65	-10.04	822.16
Micro CHP	-67.67	98.77	-3.56	5.20
PV	130.31	-1143.83	8.69	-76.26
TOTAL	22.48	2243.58	-4.91	751.10
Weighted Error =			0.40	149.09

Table 1.4

## Profiling Error Analysis

Average Site				Weighted (100 sites)			
Separate SSCs							
Technology Type	Misallocated Vol [kWh]	Total Vol [kWh]	% Misallocated	Technology	Misallocated Vol [kWh]	Total Vol [kWh]	% Misallocated
Wind	2215.08	4244.76	52.18	Wind	48731.75	93384.81	52.18
Micro CHP	249.85	464.03	53.84	CHP	8494.94	15777.07	53.84
PV	350.80	899.14	39.01	PV	15435.11	39562.22	39.01
TOTAL	2815.73	5607.94	50.21	TOTAL	72661.81	148724.10	48.86
Profile Class 8 Unrestricted							
Wind	2215.08	4244.76	52.18	Wind	48731.75	93384.81	52.18
Micro CHP	259.89	464.03	56.01	CHP	8836.13	15777.07	56.01
PV	594.05	899.14	66.07	PV	26138.02	39562.22	66.07
TOTAL	3069.01	5607.94	54.73	TOTAL	83705.90	148724.10	56.28

**Table 2.1**

Separate SSCs				
Technology Type	Total SBP Charge (per year per avg site) [£]	Total SSP Charge (per year per avg site) [£]	Net Charge (per year per avg site) [£]	Settlement Error Cost [£/MWh]
Wind	89.20	-45.91	43.29	10.20
Micro CHP	11.39	-5.36	6.03	12.99
PV	14.18	-10.08	4.10	4.56
TOTAL	114.77	-61.35	53.42	9.53
Profile Class 8 Unrestricted				
Wind	89.20	-45.91	43.29	10.20
Micro CHP	9.27	-5.91	3.36	7.23
PV	20.70	-18.28	2.43	2.70
TOTAL	119.17	-70.10	49.08	8.75

**Table 2.2**