

Appendix 3: Environmental data on production units*

Heineken Group**

Absolute figures

Performance indicator	Unit	Heineken Group**			Breweries and soft drink plants			Malting plants		
		2004	2005	2006	2004	2005	2006	2004	2005	2006
Beer production	Mhl	104.8	112.0	128.2	–	–	–	–	–	–
Soft drink production	Mhl	8.2	9.1	10.2	–	–	–	–	–	–
Malt production	ktons	579	563	588	–	–	–	–	–	–
Water	Mm3	62.3	68.7	74.6	60.1	66.4	72.2	2.2	2.3	2.4
Waste-water	Mm3	45.6	48.5	53.4	43.9	46.6	51.6	1.8	1.9	1.9
Electricity	GWh	1,150	1,230	1,380	1,080	1,160	1,310	71	68	75
Thermal energy	PJ	14	14.6	15.8	12.3	13.0	14.2	1.7	1.6	1.6
CO ₂ emissions (direct)	ktons	916	957	1,016	822	865	930	95	92	86
NO _x emissions	tons	3,140	1,970	1,770	3,070	1,750	1,700	78	217	73
SO _x emissions	tons	2,490	2,800	3,220	2,400	2,690	3,160	90	112	56
Organic load before treatment	ktons COD	127	139	140	124	135	138	3.0	3.2	2.7
Effluent organic load***	ktons COD	21.2	23.1	33.7	–	–	–	–	–	–
Effluent total nitrogen***	tons N	627	720	973	–	–	–	–	–	–
Effluent total phosphorous***	tons P	305	429	684	–	–	–	–	–	–
Effluent suspended solids***	ktons d.m.	4.22	4.82	7.64	–	–	–	–	–	–
Total hazardous waste	ktons	1.33	1.36	1.89	–	–	–	–	–	–
Non-recycled hazardous waste	ktons	0.60	0.71	0.78	–	–	–	–	–	–
Total waste-water sludge	ktons d.m.	13.2	10.4	11.2	–	–	–	–	–	–
Non-recycled waste-water sludge	ktons d.m.	4.72	4.09	1.97	–	–	–	–	–	–
Total co-products, packaging and industrial waste	ktons	2,080	2,340	2,590	–	–	–	–	–	–
Non-recycled industrial waste	ktons	100	131	140	–	–	–	–	–	–
NH ₃ in use	tons	863	891	935	–	–	–	–	–	–
NH ₃ losses	tons	105	74	107	–	–	–	–	–	–
HC-based refrigerants in use	tons	38.7	39.8	38.8	–	–	–	–	–	–
HC-based refrigerants lost	tons	12.7	8.4	13.0	–	–	–	–	–	–
	kg R11 equivalents	1,050	636	925	–	–	–	–	–	–
	ktons CO ₂ equivalents	26.3	16.4	28.2	–	–	–	–	–	–
Halons in use	tons	3.10	2.74	1.15	–	–	–	–	–	–
Complaints	number	84	89	55	–	–	–	–	–	–

* The data in Appendix 3 have not been subject to assurance, with the exception of data that are also included in the main part of the Report.

** Excluding data from Brau Holding International (Bad Brambach, Chemnitz, Karlsruhe, Rosenheim, Würzburg, Germany).

*** Discharged to surface water.

Specific figures: Breweries and soft drink plants

Performance indicator*	Unit	2004	2005	2006	2007	2008	2009
Water	hl/hl	5.47	5.49	5.22			
Targets	hl/hl			5.00	5.06	4.73	4.61
Electricity	kWh/hl	9.91	9.59	9.46			
Targets	kWh/hl			9.07	9.26	8.62	8.43
Thermal energy	MJ/hl	114	108	103			
Targets	MJ/hl			100	100	92.9	89.3
Non-recycled industrial waste	kg/hl	0.95	1.08	1.01			
Targets	kg/hl			1.06	1.14	1.13	0.67
Direct CO ₂ emission	kg CO ₂ /hl	7.65	7.15	6.72			
Targets	kg CO ₂ /hl			6.64	6.52	6.07	5.84
Indirect CO ₂ emission**	kg CO ₂ /hl	3.30	4.00	4.21			
Targets	kg CO ₂ /hl			3.78	4.12	3.83	3.75
Total CO ₂ emission	kg CO ₂ /hl	10.9	11.2	10.9			
Targets	kg CO ₂ /hl			10.4	10.6	9.91	9.59

* Figures for 2004 exclude soft drinks.

** Figures for 2004 exclude indirect CO₂ from imported heat.

Specific figures: Malting plants

Performance indicator	Unit	2003	2004	2005	2006	2007	2008
Water	m ³ /ton	3.88	4.08	4.11			
Targets	m ³ /ton			4.20	4.33	3.58	3.53
Electricity	kWh/ton	123	120	127			
Targets	kWh/ton			118	128	105	104
Thermal energy	MJ/ton	2,940	2,830	2,660			
Targets	MJ/ton			2,690	2,770	2,170	2,140