

# Overview of environmental performance

## Heineken N.V.

This table provides an overview of the environmental performance of all our operations. It includes indicators for production, energy consumption, air emissions, refrigerants, wastewater and waste from our beverage production plants, malting plants and other operations. From 2015, we have put in place a more transparent way of presenting waste data.

### Environmental data table 2015

Performance indicator	Unit	Total all sites			Breweries, Cider, Soft Drink and Water Plants			Malting sites			Other and packaging		
		2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
<b>Total beverage production</b>	<b>Mhl</b>	<b>194.9</b>	<b>197.7</b>	<b>205.2</b>	<b>194.9</b>	<b>197.7</b>	<b>205.2</b>	–	–	–	–	–	–
Beer production	Mhl	177.5	180.9	188.1	177.5	180.9	188.1	–	–	–	–	–	–
Cider production	Mhl	3.5	3.8	3.9	3.5	3.8	3.9	–	–	–	–	–	–
Soft drink production	Mhl	10.7	9.1	9.2	10.7	9.1	9.2	–	–	–	–	–	–
Water production	Mhl	3.2	3.7	3.9	3.2	3.7	3.9	–	–	–	–	–	–
Malt production	ktons	725	686	702	–	–	–	725	686	702	–	–	–
Thermal energy consumption	PJ	19.3	18.5	15.9	14.8	14.0	14.0	1.6	1.5	1.5	2.9	3.1	0.4
Electricity consumption	GWh	1,937	1,929	1,738	1,634	1,595	1,616	84	79	80	219	255	42
CO <sub>2</sub> e emissions (direct: from fuel combustion and refrigerant losses)	ktons	1,216	1,172	1,034	955	908	926	91	84	85	171	180	24
CO <sub>2</sub> e emissions (indirect: from heat and electricity import)	ktons	666	666	486	538	525	439	33	29	30	95	112	17
NO <sub>x</sub> emissions	tons	2,225	2,634	2,546	1,811	2,143	2,360	76	105	91	339	386	94
SO <sub>x</sub> emissions	tons	2,968	2,199	2,170	2,369	1,987	2,005	258	57	39	341	155	126
NH <sub>3</sub> in use	tons	1,217	1,228	1,203	1,172	1,181	1,156	4	6	6	41	41	41
NH <sub>3</sub> losses	tons	135	133	148	123	123	137	1	0	0	12	9	11
HC-based refrigerants in use	tons	48	49	57	43	42	46	4	5	5	1	1	5
HC-based refrigerants lost	tons	13.0	9.5	10.5	12.0	9.3	10.0	0.9	0.2	0.0	0.1	0.0	0.6
	kg R11 equivalents	556	348	341	547	346	341	5	1	0	4	2	0
	kton CO <sub>2</sub> equivalents	24.9	20.4	19.9	23.4	20.1	19.9	1.4	0.3	0.0	0.1	0.0	0.0
Water consumption	Mm <sup>3</sup>	83.4	81.4	80.1	79.3	76.7	76.8	2.4	2.1	2.1	1.7	2.6	1.2
Wastewater quantity	Mm <sup>3</sup>	55.4	53.0	51.7	53.5	51.0	49.6	1.1	1.3	1.3	0.8	0.8	0.8
Wastewater organic load before treatment	ktons COD	157	157	163	153	152	157	3	3	3	1	3	3

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		2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
Effluent organic load discharged to surface water	ktons COD	23.5	26.3	17.7	23.1	25.9	17.5	0.4	0.4	0.3	0.0	0.0	0.0
Effluent total nitrogen	tons N	825	454	634	806	432	621	17	18	13	2	3	0
Effluent total phosphorous	tons P	673	415	444	669	404	439	4	11	5	1	0	0
Effluent suspended solids	ktons d.m.	4.86	3.62	5.22	4.80	3.57	5.18	0.06	0.05	0.04	0.01	0.00	0.00
Total co-products, packaging and industrial waste	ktons	3,238	3,226	–	3,140	3,129	–	51	44	–	48	53	–
Non-recycled industrial waste	ktons	109	100	–	105	99	–	1	1	–	2	0	–
Total wastewater sludge	ktons d.m.	14.81	13.99	–	13.87	12.72	–	0.83	0.77	–	0.11	0.51	–
Non-recycled wastewater sludge	ktons d.m.	2.89	3.03	–	2.87	2.81	–	0.00	0.00	–	0.02	0.22	–
Total hazardous waste	ktons	3.32	9.45	–	3.12	2.52	–	0.02	0.01	–	0.18	6.92	–
Non-recycled hazardous waste	ktons	1.42	1.04	–	1.35	0.79	–	0.01	0.00	–	0.06	0.24	–
<b>Destination of co-products and waste</b>													
Re-use	tons	–	–	18,110	–	–	18,110	–	–	0	–	–	0
Human consumption	tons	–	–	54,764	–	–	54,764	–	–	0	–	–	0
Animal feed	tons	–	–	2,732,862	–	–	2,687,271	–	–	44,225	–	–	1,365
New materials	tons	–	–	220,950	–	–	215,848	–	–	173	–	–	4,930
Compost/soil improvement	tons	–	–	151,057	–	–	129,764	–	–	16,002	–	–	5,292
Fermentation into biogas	tons	–	–	43,429	–	–	15,553	–	–	0	–	–	27,876
Combustion with energy recovery	tons	–	–	18,752	–	–	18,672	–	–	29	–	–	51
Combustion without heat recovery	tons	–	–	2,350	–	–	2,350	–	–	0	–	–	0
Landfill	tons	–	–	189,131	–	–	182,314	–	–	6,353	–	–	464
Justified environmental and safety complaints	number	36	34	27	35	34	25	0	0	0	1	0	2
Justified environmental and safety accidents with off-site effects	number	34	31	16	33	31	14	0	0	0	1	0	2