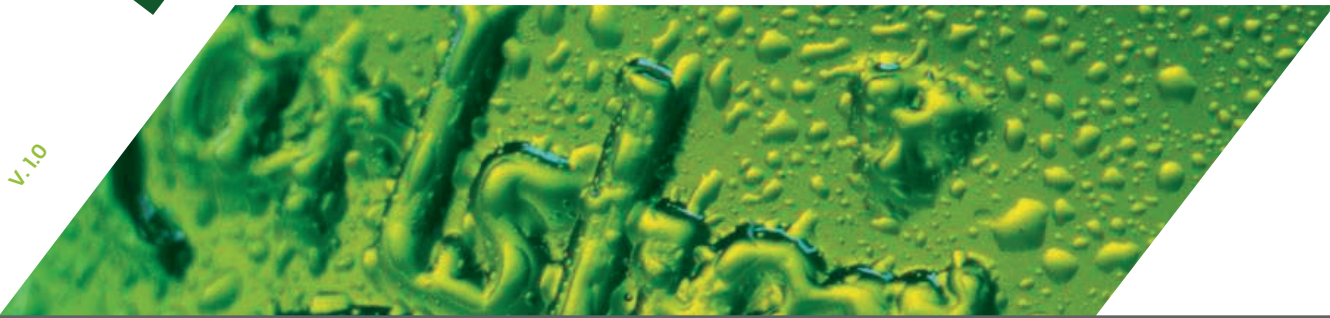


ENVIRONMENTAL DATA 2008

V.1.0



Carlsberg
Group

Energy & Emissions

Energy is essential to the brewing process. We are the most energy efficient global brewer but, as we are growing, we are using more energy. We therefore continually work to reduce our energy consumption by optimising our production processes and developing new initiatives to save energy.

Burning fuel and using electricity that is not from renewable sources results in the emission of carbon dioxide (CO₂). Carbon dioxide is the main greenhouse gas causing climate change.

Climate change poses a severe threat and tackling this issue is a shared responsibility in which Carlsberg is committed to playing an active role in. We agree with the widely-held opinion that, on a global level, far-reaching cuts in greenhouse gas emissions are needed if the worst effects of climate change are to be avoided.

We have set new targets to reduce our energy use and CO₂ emissions. Our current energy use is 30.9 kWh/hl of production and by 2012 we are targeting a reduction of at least 3%, which will take energy use per hectolitre of production to below 30 kWh.

For our CO₂ emissions, we are targeting a reduction of 8.3%, which will reduce emissions from their current level of 9.6 kg CO₂ per hectolitre of production to 8.8 kg CO₂/hl by 2012. We aim to achieve this through a mix of energy efficiency initiatives and by looking for ways to shift our fuel use to sources that emit fewer carbon emissions.

We are committed to our targets and we will continuously follow their development. We will review our targets annually and will make adjustments if necessary on a year-by-year basis to constantly strive to become more ambitious and efficient.

Our current performance is outlined in the sections below.

Energy sources

The diagram on the right shows that in 2008 55% of our total energy use came from natural gas. This has increased from 43% in 2007, mainly due to the acquisition of new sites in France and Eastern Europe that use natural gas as their main fuel source. 10% of our energy comes from coal, which is mainly used by our sites in Asia. Here, we are striving to improve our coal efficiency. One of our main challenges is that alternative energy sources are not widely available and are expensive in many of the production sites in the Asian Region

In 2008, 5% of our energy came from renewable sources, slightly more than in 2007 when the figure was 3%. The main renewable source is hydroelectric power (4%) purchased from local electricity suppliers. The remaining 1% comes from burning biogas that is the by-product of the wastewater treatment used at a number of our breweries. We expect this number to increase in the future.

Energy use

In April 2008, we acquired parts of Scottish and Newcastle. We have included these new brewing sites in our annual figures for 2008. As a result, we are reporting environmental data from 75% more sites in 2008 (77 compared to 44 in 2007) and therefore our total energy use has increased considerably. However, when compared to production we have become more energy efficient, reducing energy use by 2.5%, falling from 31.7 kWh per hectolitre of beer and soft drinks (kWh/hl) in 2007 to 30.9 kWh/hl in 2008.

Total energy use is up 153% from 1,857 GWh to 4,692 GWh*. This increase is a direct result of the addition of new breweries that were part of the Scottish and Newcastle group and inclusion of more breweries from the Asian region.

CO₂ Emissions

CO₂ emissions result directly from using energy. We are very proud that we are the most energy efficient brewing company but recognise that as we grow, we will also use more energy. We are therefore committed to reduce further our CO₂ emissions by using energy more efficiently and by looking for fuel sources that emit less CO₂ such as electricity from renewable sources, including hydro, wind and solar power, as well as burning biogas and biofuels.

In 2008 our reported CO₂ emissions rose considerably because we are reporting data from 75% more sites than 2007 due to the acquisition of Scottish and Newcastle. In total our CO₂ emissions were 1.16 million tonnes, an increase of 111% over 2007 (464,000 tonnes). If comparing to production, our emissions per hectolitre of beer and soft drinks fell by 1% from 9.7 kg CO₂/hl to 9.6 kg CO₂/hl.

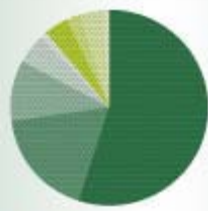
CO₂ quotas in Europe

Ten of our European sites take part in the EU Emissions Trading Scheme (EU ETS). Under the scheme participating breweries are allocated annual CO₂ emissions quotas which they must not exceed during the year.

During 2008 our European breweries only used 70% of their allocated quotas and we currently have a surplus of 60,000 tonnes of CO₂ allowances.

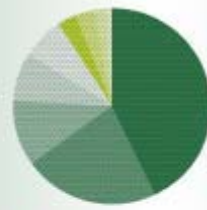
* This figure is for total energy use which includes beer, soft drinks and malt production from all 77 sites reporting environmental data in 2008. Our per hectolitre figures only cover beer and soft drink production where the output is in hectolitres of beverages and these figures relate to all 75 beer, soft drink and combined (beer and soft drink) plants.

Energy consumption
(Beer, soft drinks and malting) 2008



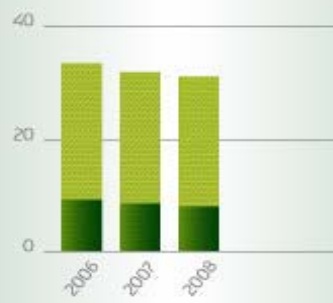
- Natural gas 55%
- Electricity 18%
- Coal 10%
- Heavy fuel 5%
- Town gas 1%
- District heating 4%
- Light fuel 2%
- Hydropower 4%
- Biogas 1%

Energy consumption
(Beer, soft drinks and malting) 2007



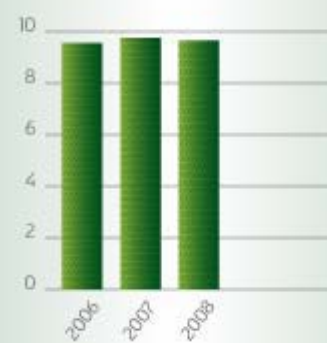
- Natural gas 43%
- Electricity 22%
- Coal 11%
- Heavy fuel 8%
- Town gas 7%
- District heating 3%
- Light fuel 3%
- Hydropower 2%
- Biogas 1%

Energy consumption
(Beer and soft drinks) (kWh/hi)



- Electricity
- Thermal energy

CO₂ emissions
(Beer and soft drinks) (Kg/hi)



Water

Water is a key resource to our business and products. It is used directly in our beverages and plays a primary role in growing the ingredients that we use to make our beers and soft drinks. Producing more beer means using more water

Water is a precious resource that requires careful management both inside and outside our operations. Water scarcity is an increasingly pressing issue - for our business and for the communities in which we operate. We are therefore developing new initiatives and processes to manage water carefully at all stages of our production.

Due to the increase in sites reporting environmental data, our total water use increased by 118% in 2008 to 477.2 million hectolitres from 218.7 million hectolitres in 2007. This large absolute increase can be attributed to the additional sites that were acquired during 2008 as part of the acquisition of Scottish & Newcastle.

To support this, and to highlight the importance of water to our business, we have established a new water efficiency target in 2009. The target, which is based on 2008 water use, calls for a 10.8% reduction in water use per hectolitre of production by 2012. If achieved, this target will take our water use to 3.3 hectolitres of water use per hectolitre of production.

Going forward we will continue to work closely with the communities in which we operate to better understand how best we can balance our water needs with the community's. Where possible we will establish partnerships with local and international organisations to further improve our water efficiency.

In May 2009, we signed the [CEO water mandate](#) to further underline our commitment to improving our water efficiency.

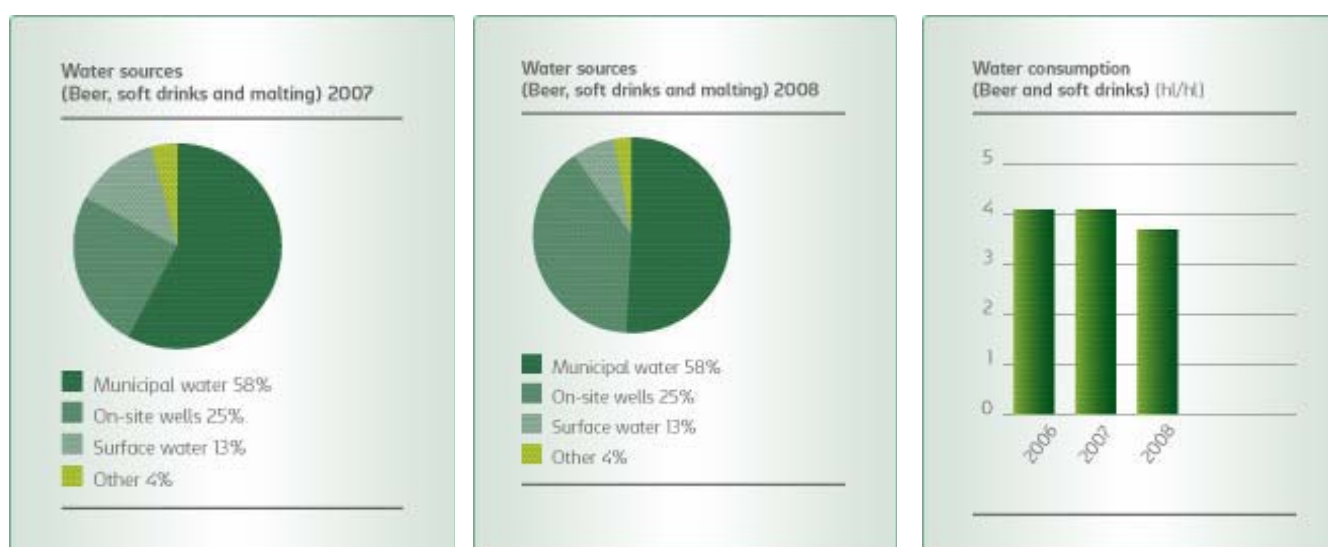
Part of our water management is managing waste water from our operations.

Water sources

Most of our water comes from either municipal water supplies (51%) or boreholes at our sites (39%). Between 2007 and 2008 water supply from municipal water supplies has dropped from 58% to 51% and water from our own boreholes has increased from 25% to 39%. These changes are mainly due to reporting data from 75% more sites in 2008, each with different water sources.

Water use

Within production, water efficiency has improved considerably from 4.1 hectolitres of water per hectolitre of beer and soft drinks in 2007 to 3.7 hl/hl in 2008, a reduction of 8.8%. This makes us the most efficient global brewing company in terms of water used to make our products



Packaging

Packaging has a significant environmental impact. When choosing the right type of packaging many different aspects have to be taken into consideration such as reuse and recycling opportunities in local markets and costs and consumer preferences

Packaging is an important element of our products. It performs many functions – maintaining the quality and integrity of our products, protecting during transport and safeguarding consumer health by keeping our beverages fresh and free of contaminants.

Packaging is also essential to the marketing of our products and how our customers and consumers perceive our products.

From an environmental perspective, packaging uses raw materials such as glass, aluminium and plastic, depending on the pack type, and also consumes energy and water in its production.

Reducing packaging impacts

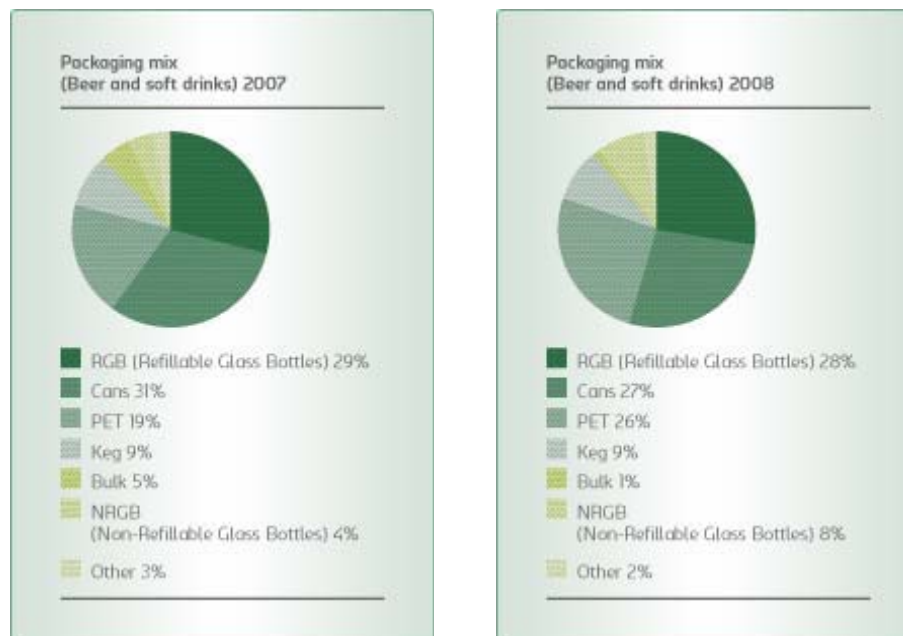
We have mapped our carbon and water footprint in order to identify the main areas of impact where we can improve. This study shows that primary packaging - packaging that comes into direct contact with the product - accounts for around 40% of our CO₂ emissions and 16% of the water use of our products throughout their whole lifecycle. It is a complex issue due to variations in local markets, which include reuse and recycling options and retailer and consumer preferences around packaging.

Still, in order to reduce the overall environmental impact of our products, we are working to reduce our impact through packaging by, for example, reducing the weight of our bottles and will further increase our work with our suppliers to focus on reducing the impact of packaging.

Moreover, we also support the reuse and recycling of packaging material and many of our companies are actively engaged in recycling campaigns.

Packaging mix

The charts to the below show our current packaging mix compared to 2007. For 2008 we are reporting data from many more sites which explains the changes to the mix of packaging types





Performance Data

In addition to our key environmental focus areas of energy and climate change, water and packaging, we manage and measure other significant environmental measures. These are shown in the full Environmental Key Performance Indicator table below and in more detail further down the page.

Scope of environmental reporting in 2008

Our environmental report details our environmental performance in the most important areas related to our business.

For 2008 our environmental reporting has progressed significantly. In 2007 we reported environmental data from 44 sites in total. For 2008 we are reporting environmental data for 77 sites, an increase of 75%. This increase is primarily caused by the acquisition of the Scottish & Newcastle Group in 2008. We have also included more Chinese sites in our environmental reporting for the first time. By increasing our reporting scope, we are better able to understand the environmental impact of our operations and identify opportunities for improvement.

The increase in sites reporting environmental data equates to a 128% increase in beer and soft drink production and a 73% increase in malt production compared to the sites that reported environmental data previously.

2008 was the last year where we reported bi-annually. Going forward from 2009, we will report on our environmental data and performance as part of our annual CSR report.

Environmental KPI scorecard	2006	2007	2008	%-Change 2007 to 2008
Sites reporting environmental data	44	44	77**	75%
Beer production (1000 hl)	40,18	43,33	109,081	152%
Soft drink production (1000 hl)	10,007	9,892	12,092	22%
Beer and soft drinks (1000 hl)	50,187	53,221	121,172	128%
Malting (tonnes)	240	228,8	395,2	73%
Energy use (kWh/hl*)	33.3	31.7	30.9	-2.50%
CO ₂ emissions (kWh/hl*)	9.5	9.7	9.6	-1.0%
Water use (hl/hl*)	4.1	4.1	3.7	-9.8%
Waste water volume discharged (hl/hl*)	2.9	2.6	2.5	-3.8%
Waste water quality (kg COD/hl*)	0.8	0.7	0.8	+14.3%
Solid waste (kg/hl*)	1.7	1.9	2.9	+52.6%
By-products (kg/hl*)	16.5	16.1	12.6	-21.7%
SO ₂ emissions (kg/hl*)	19.6	22.0	19.4	-11.8%
NOx emissions (kg/hl*)	22.3	22.6	19.9	-11.9%
Complaints	50	61	63	3.3%
No. of sites with ISO14001	38	37	39	N/A

* All per hectolitre (hl) figures relate to beer and soft drink production from our 75 production sites, per hectolitre figures do not include data for our two malting sites

**75 Breweries and two malting sites

Waste water

Waste water is a by-product of our production processes and contains organic matter from brewing, malting and fermentation as well as chemical residues from cleaning operations.

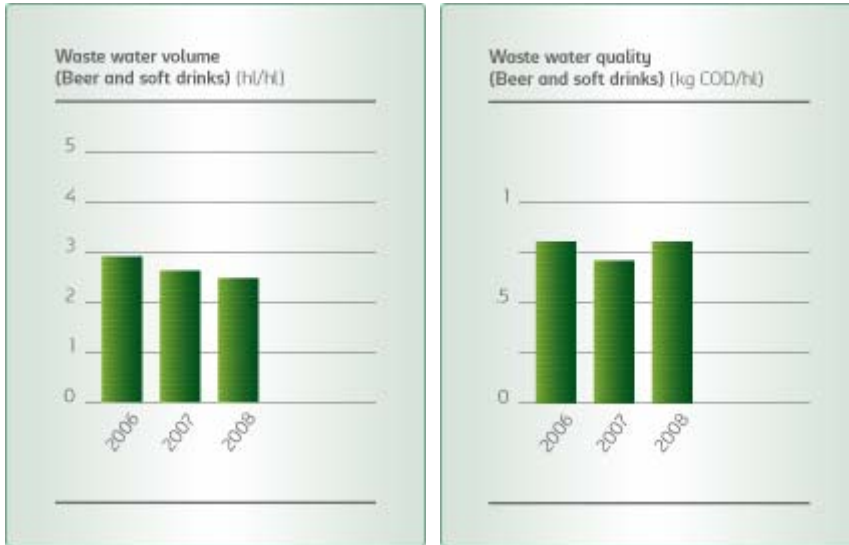
Waste water volume

For 2008 we are reporting waste water data for an extra 33 sites for the first time. Even with this increase in sites, the volume of waste water discharged per hectolitre of beer and soft drinks has fallen by 3.8% from 2.6 hl/hl in 2007 to 2.5hl/hl in 2008.

Waste water quality

We measure waste water quality in terms of Chemical Oxygen Demand. This is a standard test that determines the amount of organic pollutants in water.

We comply with water quality requirements wherever we operate and in 2008 our Chemical Oxygen Demand per hectolitre of beer and soft drinks increased from 0.7 kg COD/hl to 0.8 kg COD/hl, a rise of 14.3%.



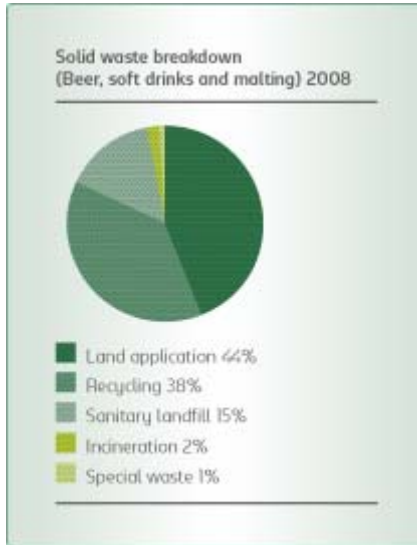
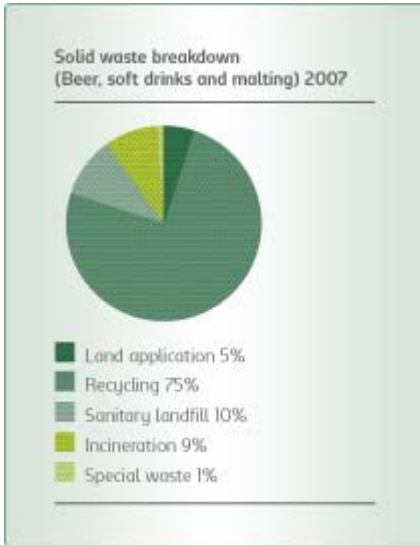
Solid waste and by-products

Other than our products, our production creates both waste and by-products. By-products are mainly spent grains from the brewing process and they have valuable uses beyond their use in brewing. Because spent grains are organic matter their main secondary uses are as feed for livestock and as fertiliser for agricultural land. Most of our spent grains are reused in this way.

By-products make up 81% of all waste and by-products from our production and the remaining 19% is made up of solid waste such as paper, glass, plastic, metal etc.

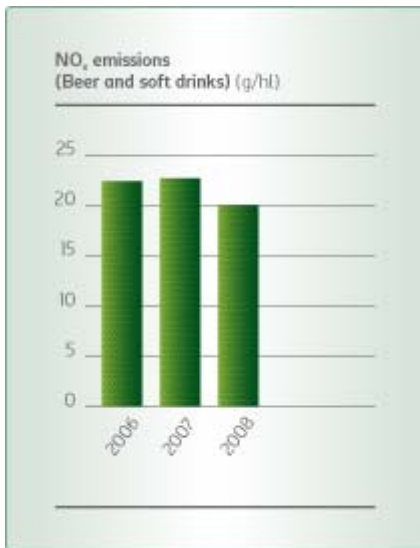
Solid waste breakdown:

The breakdown of our waste types has changed dramatically in 2008 because of the increase in sites reporting waste data in 2008. Our recycling rate has dropped from 75% to 38%. This is mainly due to an increase in sites reporting large volumes of spent grains from the brewing process that are disposed of by land application mainly from our Eastern European region.



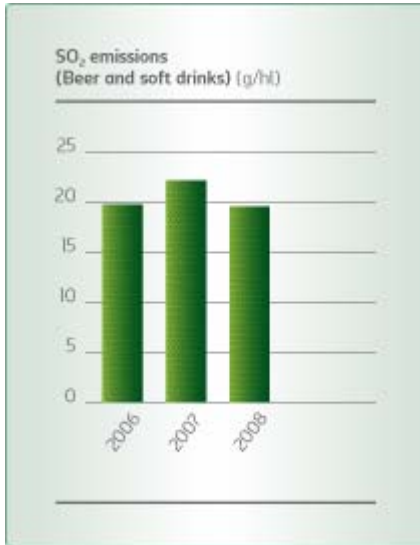
NO_x emissions

Emissions of oxides of nitrogen have fallen between 2007 and 2008, from 22.6 grams per hectolitre to 19.9 in 2008. This represents an 11.9% reduction.



SO₂ emissions

SO₂ emissions have also fallen between 2007 and 2008 from 22 gram per hectolitre in 2007 to 19.4 in 2008, an 11.8% reduction.



Complaints

	2005	2006	2007	2008
Number of Complaints	41	50	61	63
Noise	3	5	13	12
Air Emission	3	3	6	3
Odour	7	13	9	10
Waste Water	27	26	30	34
Solid Waste	1	3	3	4



Reporting Sites

Region	Country	Plant	2006	2007	2008
Asia	Cambodia	Cambrew Ltd	x	x	x
Asia	China	Dali Brewery Yunnan	x	x	x
Asia	China	urumqi No.2 Brewery			x
Asia	China	Ningxia Xixia Jianiang Brwery			x
Asia	China	Kunming Huashi Brewery Yunnan	x	x	x
Asia	China	Wusu Brewery			x
Asia	China	Tining Brewery			x
Asia	China	Aksu Brewery			x
Asia	China	kashi Brewery			x
Asia	China	Hami Brewery			x
Asia	China	Lingwu Brwery			x
Asia	China	Cangjie Brwery			x
Asia	China	Houhen Brewery			x
Asia	Laos	Lao Brewery Vientiane		x	x
Asia	Laos	Lao Brewery Pakse			x
Asia	Laos	Lao Soft Drink Co Ltd.			x
Asia	Malaysia	Carlsberg Malaysia Kuala Lumpur	x	x	x
Asia	Vietnam	Hue Brewery	x	x	x
Asia	Vietnam	Phubai Brewery			x
Asia	Vietnam	SEAB Hanoi	x	x	x
Eastern Europe	Kazakhstan	Derbes Brewery Almaty			x
Eastern Europe	Russia	Yarpivo Brewery Yaroslavl			x
Eastern Europe	Russia	Baltika Brewery St. Petersburg			x
Eastern Europe	Russia	Baltika Tula Brewery			x
Eastern Europe	Russia	Baltika Samara			x
Eastern Europe	Russia	Vena Chelyabinsk			x

Eastern Europe	Russia	baltika Don Brewery Rasti-Na-Don			x
Eastern Europe	Russia	Baltika Novosibirsk			x
Eastern Europe	Russia	Pikra Brewery Krasnoyarsk			x
Eastern Europe	Russia	Vena Brewery St. Petersburg			x
Eastern Europe	Russia	baltika Khabarovsk			x
Eastern Europe	Russia	Yaripov Voronezh			x
Eastern Europe	Ukraine	Slavutich Zaporozhye			x
Eastern Europe	Ukraine	Slavutich Kiev			x
Eastern Europe	Ukraine	Lvivska Brewery Lviv			x
Eastern Europe	Uzbekistan	Sarbast Plus			x
Northern Europe	Denmark	Tuborg Fredericia	x	x	x
Northern Europe	Denmark	Carlsberg København	x	x	x
Northern Europe	Denmark	Coca-Cola Fredericia	x	x	x
Northern Europe	Denmark	Saltum	x	x	x
Northern Europe	Estonia	Saku Olletehase as Saku			x
Northern Europe	Finland	Sinebrychoff Kereva	x	x	x
Northern Europe	Finland	Sinebrychoff Pori	x	x	x
Northern Europe	Latvia	Aldaris Riga			x
Northern Europe	Lithuania	Svyturus Utenos Alus Utena			x
Northern Europe	Lithuania	Svyturus Utenos Alus Klaipeda			x
Northern Europe	Norway	Ringnes Gjellerasen	x	x	x
Northern Europe	Norway	Ringnes E.E. Dahls Trodheim	x	x	x
Northern Europe	Norway	Ringnes Arendal	x	x	x
Northern Europe	Norway	Ringnes Farris	x	x	x
Northern Europe	Norway	Ringnes Imsdal	x	x	x
Northern Europe	Sweden	Carlsberg Sweden Falkenberg	x	x	x
Northern Europe	Sweden	Ramlosa Sweden	x	x	x
Northern Europe	Sweden	Bromma	x		
Western Europe	Bulgaria	Carlsberg Bulgaria AD Blagoevgrad	x	x	x
Western Europe	Bulgaria	Carlsberg Bulgaria AD Shumensko	x	x	x
Western Europe	Croatia	Carlsberg Croatia	x	x	x
Western Europe	France	Kronenbourg Obernai			x
Western Europe	Germany	Holsten-Brauerei Hmaburg AG	x	x	x
Western Europe	Germany	Feldschlossen Braunschweig	x	x	x
Western Europe	Germany	Feldschlossen Dresden	x	x	x
Western Europe	Germany	Mecklenburgische Brauerei Lubz	x	x	x
Western Europe	Greece	Mythos Breweries S.A			x
Western Europe	Italy	Carlsberg Italia Varese	x	x	x
Western Europe	Italy	Carlsberg Italia Ceccano	x	x	
Western Europe	Poland	Carlsberg Poland Okocim Brzesko	x	x	x
Western Europe	Poland	Carlsberg Poland Bosman Szczecin	x	x	x
Western Europe	Poland	Carlsberg Poland Kasztelan Sierpc	x	x	x
Western Europe	Poland	Danish Malting Group Poland, Sierpc	x	x	x
Western Europe	Serbia	Carlsberg Serbia	x	x	x
Western Europe	Switzerland	Feldschlossen S Rheinfeld	x	x	x
Western Europe	Switzerland	Feldschlossen Cardinal	x	x	x
Western Europe	Switzerland	Feldschlossen Sion	x	x	x
Western Europe	Switzerland	Feldschlossen Rhazuns	x	x	x
Western Europe	Switzerland	Feldschlossen Yverdons	x	x	x
Western Europe	Turkey	Turk Tuborg	x	x	
Western Europe	UK	Carlsberg UK Northhampton	x	x	x
Western Europe	UK	Carlsberg UK Leeds	x	x	x
Northern Europe	Denmark	Danish Malting Group	x	x	x