

Environmental Data for Overseas Plants

Lion daily Necessities Chemicals (Qingdao) Co., Ltd.

As of 31 December 2018

Location: Qingdao (China)

Category		Year (ton)				
		2014	2015	2016	2017	2018
CO ₂ emissions		1,121	1,336	1,668	1,843	1,719
Waste	Total waste generated	143	167	207	51	44
	Landfill waste	23	35	42	0	0
SO _x emissions		0	0	0	0	0
NO _x emissions		0	0	0	0	0
COD emissions		2	2	2	4	3

Lion Corporation(Korea)Ltd

Location: Incheon (Korea)

Category		Year (ton)				
		2014	2015	2016	2017	2018
CO ₂ emissions		13,072	12,519	13,760	15,096	14,875
Waste	Total waste generated	421	388	397	544	605
	Landfill waste	368	312	279	437	482
SO _x emissions		0	0	0	0	0
NO _x emissions		0	0	0	0	0
COD emissions		0	1	1	0	0

Lion Corporation (Thailand) Ltd.

Location: Sriracha (Thailand)

Category		Year (ton)				
		2014	2015	2016	2017	2018
CO ₂ emissions		36,538	37,207	37,902	39,120	41,486
Waste	Total waste generated	2,575	2,252	2,606	2,738	3,509
	Landfill waste	2,575	2,252	2,561	2,537	2,140
SO _x emissions		2	1	0	0	1
NO _x emissions		9	14	6	5	4
COD emissions		3	6	13	8	34

Southern Lion Sdn. Bhd.

Location: Johor (Malaysia)

Category		Year (ton)				
		2014	2015	2016	2017	2018
CO ₂ emissions		15,894	16,471	18,189	18,513	17,754
Waste	Total waste generated	582	322	156	329	355
	Landfill waste	155	152	82	110	99

•CO₂ emissions of Lion Corporation(Korea) have been calculated with the conversion factors for calorific value and CO₂ emissions of each fuel combustion and electricity in Korea.

•CO₂ emissions of other sites except Lion Corporation(Korea) were calculated with the conversion factors of 2011 for CO₂ emissions from electricity contained in "CO₂ emissions from fuel combustion highlight (2013)" published by International Energy Agency (IEA). CO₂ emissions from fuel combustions except electricity were calculated with the calculation method and conversion factors based on "the greenhouse gas emissions accounting and reporting manual of the Accounting and Reporting System (ver4.3.2) (2018)" published by the Japanese Ministry of Environment and the Ministry of Economy, Trade and Industry.