

Environmental Performance Report 2018

LEO Pharma manufacturing sites

Dermatology beyond the skin



Manufacturing sites

At LEO Pharma, we are committed to reducing the impact our business activities have on the environment. We foster a workplace where employees can thrive and manage our environmental footprint to promote a healthy planet. This report refers to the environmental performance of our manufacturing sites, for safety performance please refer to our annual report.

Our five manufacturing sites are the main focus area of this report, as this is where LEO Pharma operations have the most significant impact on the environment. All five of the LEO Pharma manufacturing sites are located in Europe, with two in Denmark (Ballerup and Esbjerg), one in France (Vernouillet) and two in Ireland (Dublin and Cork). LEO Pharma previously operated a manufacturing site in Southport Australia, this was decommissioned in 2017 and as a result is not included in 2018 data. All LEO Pharma manufacturing sites are accredited to ISO 14001.

This report covers LEO Pharma's main impacts on the environment, which are the use of energy and water, generation of waste and waste water, indirect and direct emissions of greenhouse gases and other air emissions.







LEO Pharma's environmental and energy impacts at a glance

	2013	2014	2015	2016	2017	2018
Total energy consumption (MWh)	128,905	124,259	124,119	127,537	126,540	117,572
Energy intensity (MWh/tonne)	26.34	23.48	23.56	23.61	27.11	23.70
Share of electricity from renewable sources (%)	47%	51%	53%	55%	58%	61%
GHG emissions (scope 1+2, tonnes $CO_{_{2e}}$)	31,371	30,355	30,248	31,121	31,376	28,569
Direct GHG emissions (scope 1, tonnes $CO_{_{2e}}$)*	15,884	15,371	15,332	15,996	15,183	14,752
Direct GHG emissions (scope 2, tonnes $CO_{_{2e}})^*$	15,487	14,984	14,916	15,125	16,194	13,818
Total water input (M³)	346,952	317,311	322,196	360,187	304,370	297,734
Total waste output (tonnes)	98,761	86,531	82,947	78,969	70,219	56,241
Complaints	2	0	1	3	2	2
Environmental incidents	38	78	67	34	14	35
ISO 14001 certified sites	2	4	5	5	5	5

* GHG emissions have been calculated in accordance with the Greenhouse Gas Protocol (GHG Protocol)



Energy consumption (MWh)	2013	2014	2015	2016	2017	2018
Denmark	73,134	68,517	68,617	72,280	70,356	63,530
France	16,786	16,705	17,439	16,841	16,408	16,711
Ireland	37,177	37,308	36,278	37,230	38,149	37,331
Australia	1,808	1,730	1,785	1,186	1,627	-
Total	128,905	124,259	124,119	127,537	126,540	117,572



Renewable electricity - % share of total	2013	2014	2015	2016	2017	2018
Denmark	43%	49%	51%	54%	60%	63%
France	17%	18%	19%	19%	20%	21%
Ireland*	83%	89%	85%	88%	66%	69%
Australia	15%	13%	15%	16%	15%	15%
Total across all sites	47%	51%	53%	55%	58%	61%

* Cork site in Ireland is on a 100% renewable electricity contract since 2012.



Inputs -> Water

Water consumption (M ³)	2013	2014	2015	2016	2017	2018
Water input by country:						
Denmark	197,043	166,603	176,646	181,892	175,814	146,004
France	36,719	44,328	41,990	31,285	26,123	26,634
Ireland	109,004	101,941	102,257	145,242*	101,403	125,096
Australia	4,186	4,439	1,303	1,768	1,030	-
Total	346,952	317,311	322,196	360,187	304,370	297,734

* High water input in 2016 due to water leak at Cork site

Outputs → Waste

Waste generated by manufacturing sites (tonnes)	2013	2014	2015	2016	2017	2018
Waste input by country:						
Denmark	96,475	84,266	80,204	76,733	68,523	54,343
France	581	542	735	765	632	620
Ireland	894	890	999	1,044	1,064	1,279
Australia	811	833	1,009	427	-	-
Total	98,761	86,531	82,947	78,969	70,219	56,241
Waste by treatment rate:						
Recycling	98.13%	97.73%	98.52%	98.37%	98.45%	98.54%
Special treatment	1.14%	1.36%	0.29%	0.27%	0.19%	0.26%
Incineration with energy recovery	0.85%	0.81%	0.94%	1.06%	0.77%	1.44%
Incineration without energy recovery	0.33%	0.37%	0.38%	0.41%	0.46%	0.30%
Landfill	0.25%	0.18%	0.10%	0.04%	0.09%	0.16%

* High recycling rate driven by process at Esbjerg site where residual waste is processed and used as fartilizer or for production of biogas



Outputs → Waste water

Waste water	2013	2014	2015	2016	2017	2018
Waste water (M ³):						
Denmark	163,983	117,947	141,292	154,465	145,634	112,192
France	44,718	44,260	51,989*	29,917	31,698	26,087
Ireland	82,643	65,337	68,074	82,443	92,036	100,452
Australia	622	413	380	158	-	-
Total	291,966	227,957	261,735	266,983	269,368	238,731
Chemical oxygen demand COD (tonnes):						
Denmark	426	253	343	335	453	230
France	6	6	9	9	9	9
Ireland	28	28	30	28	31	27
Australia **	-	-	-	-	-	-
Total	460	287	381	371	493	266
Total organic carbon TOC (tonnes):						
Denmark	142	84	114	112	151	77
France	2	2	3	3	3	3
Ireland	6	9	10	9	6	7
Australia**	-	-	-	-	-	-
Total	150	96	127	124	160	86

* Significant increase in waste water in 2015 due to issue with flow meter at Vernouillet site ** COD and TOC are not routinely measured by Southport, Australia site.



Outputs → Emissions to air

Emissions to air (tonnes)	2013	2014	2015	2016	2017	2018
Organic solvents:						
Denmark	11	11	8	5	60*	34
France	2	3	8	4	4	5
Ireland	-	-	-	-	-	-
Australia	1	1	-	-	-	-
Total	14	15	16	9	64	38
CO ₂ scope 1 emissions**:						
Denmark	7,334	6,726	6,840	7,297	6,900	6,538
France	1,795	1,803	1,954	1,912	1,799	1,855
Ireland	6,696	6,811	6,522	6,784	6,484	6,359
Australia	58	32	15	3.5	0.40	0
Total	15,884	15,371	15,332	15,996	15,183	14,752
NO _x :						
Denmark	6	5	5	6	5	5
France	-	2	1	1	1	1
Ireland	6	12	12	12	12	11
Australia	0	0	0	-	-	-
Total	12	19	18	18	18	17
SO ₂ :						
Denmark	0.0400	0.0370	0.0370	0.0700	0.0340	0.0320
France	0.0200	0.0200	0.0200	0.0300	0.0260	0.0300
Ireland	-	-	-	-	-	-
Australia	0.0832	0.0850	0.0900	-	-	-
Total	0.1432	0.1420	0.1470	0.1000	0.0600	0.0620
Ozone depleting substances ODS:						
Denmark	0.1050	0.0390	0.0450	0.0470	0.0220	-
France	-	-	0.0042	-	-	-
Ireland	0.0503	0.0020	0.0605	0.0723	-	-
Australia						
Total	0.1553	0.0410	0.1097	0.1193	0.0220	-

Increase in organic solvent emissions in 2017 due to insufficient regenerations of carbon filter at Ballerup site
CO₂ scope 1 (direct emissions) calculated using methodology from Greenhouse Gas Protocol (World Resources Institute 2015 GHG Protocol tool for stationary combustion V4.1)



Complaints and environmental incidents

Complaints and environmental incidents	2013	2014	2015	2016	2017	2018
No. of complaints:						
Denmark	-	-	1	3	1	1
France	-	-	-	-	-	-
Ireland	2	-	-	-	1	1
Australia	-	-	-	-	-	-
Total	2	-	1	3	2	2
No. of environmental incidents reported to the authorities:						
Denmark	18	61*	45*	28	9	3
France	3	4	12	-	-	-
Ireland	16	13	10	6	5	32
Australia	1	-	-	-	-	_
Total	38	78	67	34	14	35

* High rates of incidents in 2014 and 2015 due to waste water discharges exceeding consented levels, did not affect environment downstream of the waste water treatment plant.

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 \odot December 2019 LEO Pharma A/S

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