

# KEY FIGURES ENVIRONMENT

## ENVIRONMENTAL IMPACT

Environmental impact	2017 UBP	2018 UBP	Deviation %
Electricity	101,507	97,762	-3.7
Combustibles	104,971	98,070	-6.6
Fuels	15,580	16,532	6.1
Disposal	4,156	3,844	-7.5
Solvents	1,288	1,165	-9.5
Water and waste water	2,521	2,489	-1.3
<b>Total environmental impact</b>	<b>230,023</b>	<b>219,862</b>	<b>-4.4</b>

UBP = Ecopoints in million UBP in accordance with the Swiss Ecological Scarcity Method (version 2013)

## MATERIAL USAGE

Material usage	2017 Metric tons	2018 Metric tons	Deviation %
Raw material plastics	72,776	73,276	0.7
Raw material metal	62,816	66,010	5.1
Raw material mineral	182,047	176,211	-3.2
Other raw materials	3,918	3,457	-11.8
Semi-finished products	46,140	43,168	-6.4
Finished products	46,940	47,451	1.1
<b>Total material usage</b>	<b>414,637</b>	<b>409,573</b>	<b>-1.2</b>

## ENERGY CONSUMPTION

Energy consumption	Unit	2017	2018	Deviation %
<b>Electricity</b>	GWh	227.4	224.1	-1.5
<b>District heating</b>	GWh	13.2	13.3	1.4
<b>Combustibles</b>				
Natural gas	m <sup>3</sup>	45,589,538	43,076,216	-5.5
Biogas	m <sup>3</sup>	869,343	809,171	-6.9
Liquified petroleum gas (LPG)	Metric tons	6,209.0	5,635.0	-9.2
Diesel for electricity generation	l	49,993	36,019	-28.0
Heating oil extra light	Metric tons	16.1	7.6	-53.0
Solid fuels	Metric tons	1,958.7	1,307.1	-33.3
<b>Fuels</b>				
Gasoline	l	169,288	242,845	43.5
Diesel	l	2,454,316	2,557,879	4.2
Liquified petroleum gas (LPG)	kg	160,568	165,684	3.2
Natural gas (CNG)	kg	8,005	4,847	-39.4

	2017 TJ	2018 TJ	Deviation %
<b>Energy consumption</b>			
<b>Electricity</b>	818.6	806.7	-1.5
<b>District heating</b>	47.3	48.0	1.4
<b>Combustibles</b>	2,015.3	1,882.9	-6.4
Natural gas	1,659.5	1,567.9	-5.5
Biogas	31.6	29.5	-6.9
Liquified petroleum gas (LPG)	287.5	260.9	-9.2
Diesel for electricity generation	1.8	1.3	-28.0
Heating oil extra light	0.7	0.3	-53.0
Solid fuels	34.2	23.0	-33.3
<b>Fuels (gasoline, diesel, LPG, CNG)</b>	101.4	107.4	6.0
<b>Total energy consumption</b>	<b>2,982.6</b>	<b>2,845.0</b>	<b>-4.6</b>

## ELECTRICITY MIX

Electricity mix 2018	GWh	Renewable %	Fossil %	Nuclear %	Others %
Europe	159.7	24.3	54.8	19.5	1.4
USA	6.6	9.6	70.3	19.4	0.7
China	5.9	19.1	78.8	2.1	0.0
India	1.8	16.4	81.8	1.8	0.0
Green electricity	50.1	100.0	0.0	0.0	0.0
<b>Total electricity mix</b>	<b>224.1</b>	<b>40.6</b>	<b>43.8</b>	<b>14.6</b>	<b>1.0</b>

Electricity mix 2017	GWh	Renewable %	Fossil %	Nuclear %	Others %
Europe	166.0	23.8	54.7	20.2	1.3
USA	6.7	9.7	70.2	19.4	0.7
China	5.9	19.1	78.8	2.1	0.0
India	1.7	16.4	81.8	1.8	0.0
Green electricity	47.1	100.0	0.0	0.0	0.0
<b>Total electricity mix</b>	<b>227.4</b>	<b>39.0</b>	<b>44.6</b>	<b>15.4</b>	<b>1.0</b>

## WATER AND WASTE WATER

Water	2017 m <sup>3</sup>	2018 m <sup>3</sup>	Deviation %
Drinking water	313,114	271,311	-13.4
Well water	539,477	517,658	-4.0
River and lake water	267,948	232,096	-13.4
Rain water	9,354	11,436	22.3
<b>Total water</b>	<b>1,129,893</b>	<b>1,032,501</b>	<b>-8.6</b>

Waste water	2017 m <sup>3</sup>	2018 m <sup>3</sup>	Deviation %
Domestic waste water	201,903	201,427	-0.2
Process water ceramic	585,566	583,883	-0.3
Other waste water	24,300	22,846	-6.0
<b>Total waste water</b>	<b>811,769</b>	<b>808,156</b>	<b>-0.4</b>

## EMISSIONS

<b>CO<sub>2</sub> emissions</b>	<b>2017 Metric tons</b>	<b>2018 Metric tons</b>	<b>Deviation %</b>
from combustibles (Scope 1)	118,975	111,291	-6.5
from fuels (Scope 1)	7,466	7,927	6.2
from process emissions (Scope 1)	542	229	-57.8
from electricity (Scope 2)	115,752	111,973	-3.3
from district heating (Scope 2)	61	64	3.9
<b>Total CO<sub>2</sub> emissions</b>	<b>242,796</b>	<b>231,484</b>	<b>-4.7</b>

Calculation of CO<sub>2</sub> emissions according to IPCC 2013

<b>Air emissions</b>		<b>2017 Kilogram</b>	<b>2018 Kilogram</b>	<b>Deviation %</b>
NO <sub>x</sub>	direct	59,751	55,858	-6.5
	indirect	156,009	151,373	-3.0
	<b>Total NO<sub>x</sub></b>	<b>215,760</b>	<b>207,231</b>	<b>-4.0</b>
SO <sub>2</sub>	direct	1,549	1,468	-5.2
	indirect	302,954	293,364	-3.2
	<b>Total SO<sub>2</sub></b>	<b>304,503</b>	<b>294,832</b>	<b>-3.2</b>
NMVOC	direct	83,151	84,086	1.1
	indirect	20,135	19,471	-3.3
	<b>Total NMVOC</b>	<b>103,286</b>	<b>103,557</b>	<b>0.3</b>
Dust (PM10)	direct	2,142	1,578	-26.4
	indirect	32,685	31,720	-3.0
	<b>Total dust</b>	<b>34,827</b>	<b>33,298</b>	<b>-4.4</b>
CFC11 equivalents	direct	0.4	0.4	5.4
	indirect	9.3	9.0	-3.7
	<b>Total CFC11 equivalents</b>	<b>9.7</b>	<b>9.4</b>	<b>-3.1</b>

Calculation based on Ecoinvent data version 3.1

## WASTE

<b>Waste</b>	<b>2017 Metric tons</b>	<b>2018 Metric tons</b>	<b>Deviation %</b>
to incineration	1,432	1,434	0.2
to inert waste landfill	19,726	18,082	-8.3
to mixed waste landfill	882	933	5.8
to external recycling	58,418	62,260	6.6
to hazardous waste incineration	896	777	-13.4
to hazardous waste recycling	599	588	-1.8
<b>Total waste</b>	<b>81,953</b>	<b>84,074</b>	<b>2.6</b>

# KEY FIGURES EMPLOYEES AND SOCIETY

## WORKFORCE

Workforce as of December 31, 2018	2017	Share %	2018	Share %
Germany	3,329	28.4	3,282	28.2
Poland	1,603	13.7	1,655	14.2
Switzerland	1,362	11.6	1,395	12.0
Ukraine	638	5.4	660	5.7
Austria	551	4.7	557	4.8
China	565	4.8	530	4.6
Italy	509	4.4	520	4.5
France	539	4.6	431	3.7
Others	2,613	22.4	2,600	22.3
<b>Total</b>	<b>11,709</b>	<b>100.0</b>	<b>11,630</b>	<b>100.0</b>
Production	7,291	62.3	7,103	61.1
Marketing and sales	2,844	24.3	2,928	25.2
Administration	936	8.0	932	8.0
Research and development	403	3.4	420	3.6
Apprentices	235	2.0	247	2.1
<b>Total</b>	<b>11,709</b>	<b>100.0</b>	<b>11,630</b>	<b>100.0</b>
Permanent	9,181	78.4	9,625	82.8
Temporary	2,528	21.6	2,005	17.2
<b>Total</b>	<b>11,709</b>	<b>100.0</b>	<b>11,630</b>	<b>100.0</b>
Full-time	11,146	95.2	11,071	95.2
Part-time	563	4.8	559	4.8
<b>Total</b>	<b>11,709</b>	<b>100.0</b>	<b>11,630</b>	<b>100.0</b>
Management	202	1.7	207	1.8
Employees	11,507	98.3	11,423	98.2
<b>Total</b>	<b>11,709</b>	<b>100.0</b>	<b>11,630</b>	<b>100.0</b>

Information in full-time equivalents

## DIVERSITY

Diversity as of December 31, 2018		Management %	Employees %	Total %
Proportion of female employees		8.6	24	24
Age structure	> 45 years	80.2	40	41
	30 - 45 years	19.8	43	42
	< 30 years	0.0	17	17

Diversity as of December 31, 2017		Management %	Employees %	Total %
Proportion of female employees		8.4	24	23
Age structure	> 45 years	78.2	40	40
	30 - 45 years	21.3	42	42
	< 30 years	0.5	18	18

## FLUCTUATION

Fluctuation excl. natural departures		2016	Rate %	2017	Rate %	2018	Rate %
Age group	> 45 years	432	9.7	240	5.6	259	6.0
	30 - 45 years	504	12.5	379	9.8	393	9.9
	< 30 years	135	14.0	203	21.6	190	18.7
Gender	Male	670	9.4	631	9.1	634	8.9
	Female	401	17.4	191	8.8	208	9.5
Region	Germany	70	2.6	97	3.6	153	5.7
	Poland	100	14.6	183	25.5	73	8.1
	Switzerland	81	6.6	71	5.7	113	8.9
	Ukraine	512	57.9	160	26.2	116	18.9
	Austria	35	6.9	48	9.5	44	8.3
	China	18	7.3	20	7.9	21	8.7
	Italy	12	2.9	13	3.0	2	0.4
	France	50	7.9	60	11.2	121	25.9
	Others	193	9.1	170	7.9	199	9.1
	<b>Total fluctuation excl. natural departures</b>		<b>1,071</b>	<b>11.3</b>	<b>822</b>	<b>9.0</b>	<b>842</b>

Fluctuation incl. natural departures		2016	Rate %	2017	Rate %	2018	Rate %
Age group	> 45 years	558	12.5	402	9.4	404	9.3
	30 - 45 years	507	12.5	380	9.8	396	9.9
	< 30 years	137	14.2	204	21.7	190	18.7
Gender	Male	758	10.6	757	10.9	732	10.2
	Female	444	19.2	231	10.7	258	11.8
Region	Germany	129	4.7	155	5.8	220	8.2
	Poland	103	15.0	195	27.2	76	8.4
	Switzerland	100	8.2	88	7.1	133	10.5
	Ukraine	515	58.2	160	26.2	116	18.9
	Austria	37	7.3	51	10.1	54	10.2
	China	20	8.1	23	9.1	32	13.2
	Italy	14	3.4	14	3.3	2	0.4
	France	67	10.6	90	16.8	139	29.8
	Others	217	10.2	212	9.9	218	10.0
	<b>Total fluctuation incl. natural departures</b>		<b>1,202</b>	<b>12.7</b>	<b>988</b>	<b>10.9</b>	<b>990</b>

Information in headcounts  
Natural departures includes retirements

## TRAINING AND EDUCATION

Training and education	Hours per employee	2017	2018	Deviation %
Women		11.2	11.8	5.4
Men		11.1	14.3	28.8
Management		8.9	9.0	1.1
Other employees		11.1	13.8	24.3
<b>Training and education group</b>		<b>11.1</b>	<b>13.7</b>	<b>23.4</b>

## PERSONNEL EXPENSES

Personnel expenses	2017 MCHF	2018 MCHF	Deviation %
Wages and salaries	537.2	561.3	4.5
Pension contributions	30.1	36.9	22.6
Other social benefits	97.8	107.6	10.0
Other personnel expenses	81.7	38.2	-53.2
<b>Total personnel expenses</b>	<b>746.8</b>	<b>744.0</b>	<b>-0.4</b>

## SOCIAL ENGAGEMENT

Social engagement	Unit	2017	2018	Deviation %
Donations and contributions	MCHF	3.3	4.1	24.2
Orders to social institutions	MCHF	6.9	8.1	17.4
Charitable work	Hours	2,260	1,380	-38.9

## HEALTH AND SAFETY

Health and safety	2017	2018	Deviation %
Number of occupational accidents	205	191	-6.8
Accident frequency rate (AFR)	10.3	9.7	-5.8
Lost days due to occupational accidents	4,065	3,584	-11.8
Accident severity rate (ASR)	203.8	181.5	-10.9

Accident frequency rate (AFR) = Number of occupational accidents per million working hours performed

Accident severity rate (ASR) = Number of lost working days due to accidents per million working hours performed

Absenteeism rate per region 2018	Illness %	Accident %	Total %
Europe	5.07	0.11	5.18
Asia	1.46	0.05	1.51
USA	4.31	0.77	5.08
Others	0.86	0.00	0.86
<b>Absenteeism rate group</b>	<b>4.77</b>	<b>0.12</b>	<b>4.89</b>

Absenteeism rate per region 2017	Illness %	Accident %	Total %
Europe	4.88	0.15	5.02
Asia	2.44	0.05	2.49
USA	2.26	0.08	2.34
Others	0.61	0.00	0.61
<b>Absenteeism rate group</b>	<b>4.62</b>	<b>0.14</b>	<b>4.76</b>

Absenteeism rate based on regular working hours