	GENERAL STANDARD DISCLOSURES					
General Standards	General Disclosures	Definition	Page Number (online PDF report) or Link	External Assurance		
	102-1	Name of the organization	Page 4	Page 51		
	102-2	Activities, brands, products, and services	Page 5	Page 51		
	102-3	Location of headquarters	Page 5	Page 51		
	102-4	Location of operations	Page 5; 51 http://www.firmenich.com/en_INT/locations.ht ml	Page 51		
	102-5	Ownership and legal form	Page 5	Page 51		
	102-6	Markets served	Page 5	Page 51		
	102-7	Scale of the organization	Page 5	Page 51		
CDI 103.	102-8	Information on employees and other workers	Page 5; 21	Page 51		
GRI 102: General	102-9	Supply chain	Page 5; 49-50	Page 51		
Disclosures	102-10	Significant changes to the organization and its supply chain	Page 5	Page 51		
	102-11	Precautionary Principle or approach	Pages 6-7; 14; 17	Page 51		
	102-12	External initiatives	Pages 13; 19; 20; 42 http://www.firmenich.com/en_INT/sustainability/Firmenich-Human-Rights-Policy-Statement.html	Page 51		
	102-13	Membership of associations	Page 5 of the Summary Report	Page 51		
	102-14	Statement from senior decision-maker	Pages 6-7	Page 51		
	102-15	Key impacts, risks, and opportunities	Pages 14; pages 9-10 of the materiality report	Page 51		
	102-16	Values, principles, standards, and norms of behavior	Pages 17; 52	Page 51		

1	102-18	Governance structure	Pages 7; 18; 19; 45	Page 51
1	102-40	List of stakeholder groups	Page 14; pages 2-3 of the <u>materiality report</u> ; Firmenich's website	Page 51
1	102-41	Collective bargaining agreements	Page 21	Page 51
1	102-42	Identifying and selecting stakeholders	Page 14; Firmenich's website	Page 51
1	102-43	Approach to stakeholder engagement	Page 14; pages 2-3 of the materiality report	Page 51
1	102-44	Key topics and concerns raised	Page 14; page 4 of the materiality report	Page 51
	102-45	Entities included in the consolidated financial statements	The list of entities is available on our website on the following map: http://www.firmenich.com/en_INT/locations.html All the locations on the map are included in the financial statement.	Page 51
1	102-46	Defining report content and topic Boundaries	Pages 13-14; pages 4 and 9 of the materiality report	Page 51
1	102-47	List of material topics	Page 14, page 4 of the materiality report	Page 51
1	102-48	Restatements of information	Performance table on page 12 of this Index	Page 51
1	102-49	Changes in reporting	Pages 13-14	Page 51
1	102-50	Reporting period	Page 51	Page 51
1	102-51	Date of the most recent report	Page 51	Page 51
1	102-52	Reporting cycle	Page 51	Page 51
	102-53	Contact point for questions regarding the report	Page 51	Page 51
	102-54	Claims of reporting in accordance with the GRI Standards	Page 51	Page 51
1	102-55	GRI content index	http://www.firmenich.com/GRI Index2018.pdf	Page 51
	102-56	External assurance	Page 51	Page 51

		MATERIAL TOPIC	S	
	DMA and Indicators	Definition	Page Number or Link	External Assurance
		ECONOMIC		
		ECONOMIC PERFORMA	ANCE	
GRI 103: Management	103-1	Explanation of the material topic and its Boundary	Economic performance is critical to the success of our company so we need to ensure that our business is financially sustainable in the shortand long-term.	Page 51
Management Approach	103-2	The management approach and its components	Pages 10-12	Page 51
	103-3	Evaluation of the management approach	Page 5	Page 51
GRI 201: Economic	201-1	Direct economic value generated and distributed	Page 5 Due to the private ownership of the company we are limited in our disclosure of economic indicators.	Page 51
Performance	201-2	Financial implications and other risks and opportunities due to climate change	Pages 42-44	Page 51
	<u>.</u>	ANTI-CORRUPTION	İ	
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Page 9 of the <u>materiality report;</u> http://www.firmenich.com/uploads/files/comp any/Global_Anticorruption_Corporate_Policy.p df	Page 51
	103-2	The management approach and its components	Page 17	Page 51
	103-3	Evaluation of the management approach	Page 17 https://secure.ethicspoint.eu/domain/media/e n/gui/104533/index.html	Page 51
GRI 205: Anti- corruption	205-2	Communication and training about anti- corruption policies and procedures	Page 17	Page 51

		ENVIRONMENTAL		
		ENERGY		
GRI 103:	103-1	Explanation of the material topic and its Boundary	Pages 9 and 11 of the <u>materiality report</u>	Page 51
Management	103-2	The management approach and its components	Pages 38-39	Page 51
Approach	103-3	Evaluation of the management approach	Pages 38-39	Page 51
GRI 302: Energy	302-4	Reduction of energy consumption	Page 41 and performance table available on page 15 of this Index	Page 51
		WATER		
GRI 103:	103-1	Explanation of the material topic and its Boundary	Pages 42-43; page 9 and 11 of the <u>materiality</u> report	Page 51
Management	103-2	The management approach and its components	Pages 38-39; 42-43	Page 51
Approach	103-3	Evaluation of the management approach	Pages 38-39; 42-43	Page 51
GRI 303: Water	303-1	Water withdrawal by source	Page 43; performance table on page 15 of this Index	Page 51
	Internal indicator	Water footprint reduction in water-stressed area	Pages 39; 43 and performance table on page 14 of this Index	Page 51
		BIODIVERSITY		
GRI 103:	103-1	Explanation of the material topic and its Boundary	Page 45; pages 9 and 11 of the materiality report	Page 51
Management	103-2	The management approach and its components	Page 45	Page 51
Approach	103-3	Evaluation of the management approach	Page 45	Page 51
GRI 304: Biodiversity	304-2	Significant impacts of activities, products, and services on biodiversity	Page 45	Page 51
		EMISSIONS		
GRI 103: Management	103-1	Explanation of the material topic and its Boundary	Pages 40-42; pages 9 and 11 of the <u>materiality</u> report	Page 51
Approach	103-2	The management approach and its components	Pages 38-42	Page 51

	103-3	Evaluation of the management approach	Pages 38-39; 42	Page 51
	305-1	Direct (Scope 1) GHG emissions	Pages 39-41; 51; performance table on page 14 of this Index	Page 51
	305-2	Energy indirect (Scope 2) GHG emissions	Pages 39-41; 51; performance table on page 14 of this Index	Page 51
GRI 305: Emissions	305-3	Other indirect (Scope 3) GHG emissions	Pages 42; performance table on page 15 of this Index	Page 51
	305-5	Reduction of GHG emissions	Pages 39-40; 42	Page 51
	305-7	Nitrogen oxides (NO_x), sulfur oxides (SO_x), and other significant air emissions	Performance table on page 15 of this Index	Page 51
		EFFLUENTS AND WAS	STE	
GRI 103:	103-1	Explanation of the material topic and its Boundary	Pages 9 and 11 of the materiality report	Page 51
Management	103-2	The management approach and its components	Pages 38; 43	Page 51
Approach	103-3	Evaluation of the management approach	Pages 38-39	Page 51
GRI 306:	306-1	Water discharge by quality and destination	Performance table on page 15 of this Index	Page 51
Effluents and Waste	306-2	Waste by type and disposal method	Performance table on page 15 and 16 of this Index	Page 51
		SUPPLIER ENVIRONMENTAL A	SSESSMENT	
GRI 103:	103-1	Explanation of the material topic and its Boundary	Pages 9-10 of the <u>materiality report</u>	Page 51
Management	103-2	The management approach and its components	Pages 42; 50	Page 51
Approach	103-3	Evaluation of the management approach	Pages 42;50	Page 51
GRI 308: Supplier Environmental Assessment	308-1	New suppliers that were screened using environmental criteria	We screen our suppliers according to several criteria including environmental criteria. Although we do record the entry date of the vendors in our systems, we are not able to provide the percentage of new suppliers that were screened using environmental criteria but	Page 51

			are working on our systems to be able to report	
		SOCIAL	on this indicator in FY19.	
		EMPLOYMENT		
GRI 103: Management	103-1	Explanation of the material topic and its Boundary	Although this issue is not considered to be a high material issue, we believe that employment and the ability to hire, attract and retain talented employees is critical to foster innovation.	Page 51
Approach	103-2	The management approach and its components	Page 16; 21; Firmenich's website	Page 51
	103-3	Evaluation of the management approach	Page 16; 21	Page 51
GRI 401: Employment	401-1	New employee hires and employee turnover	Page 21	Page 51
		OCCUPATIONAL HEALTH AN	ND SAFETY	
GRI 103:	103-1	Explanation of the material topic and its Boundary	Page 9 of the <u>materiality report</u>	Page 51
Management	103-2	The management approach and its components	Pages 16; 23	Page 51
Approach	103-3	Evaluation of the management approach	Pages 8; 16; 23	Page 51
GRI 403: Occupational Health and Safety	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Page 23; performance table on page 14 of this Index Absentees are not included.	Page 51
		DIVERSITY AND EQUAL OPP	ORTUNITY	
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundaries	Page 20; pages 9-10 of the materiality report	Page 51
	103-2	The management approach and its component	Page 16; 20	Page 51
	103-3	Evaluation of the management approach	Page 16; 20	Page 51
GRI 405: Diversity and	405-1	Diversity of governance bodies and employees	Page 20; performance table on page 13 of this Index	Page 51

Equal				
Opportunity				
		HUMAN RIGHTS ASSESSI	MENT	
	103-1	Explanation of the material topic and its Boundaries	Page 19; pages 9-10 of the materiality report	Page 51
GRI 103: Management Approach	103-2	The management approach and its component	Pages 16; 19; https://secure.ethicspoint.eu/domain/media/e n/gui/104533/index.html	Page 51
	103-3	Evaluation of the management approach	Pages 16; 19	Page 51
GRI 412: Human Rights Assessment	412-2	Employee training on human rights policies or procedures	We are developing trainings on human rights which will be delivered in FY19.	Page 51
		LOCAL COMMUNITIE	ES .	
	103-1	Explanation of the material topic and its Boundaries	Page 31; pages 9-10 of the materiality report	Page 51
GRI 103: Management Approach	103-2	The management approach and its component	Page 32; https://secure.ethicspoint.eu/domain/media/e n/gui/104533/index.html	Page 51
	103-3	Evaluation of the management approach	Page 32	Page 51
GRI 413: Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	Pages 22; 32; 34; 44	Page 51
	Internal indicator	Deep Roots beneficiaries	Pages 32 and 34	
		SUPPLIER SOCIAL ASSESS	MENT	l
GRI 103:	103-1	Explanation of the material topic and its Boundaries	Page 30; pages 9-10 of the materiality report	Page 51
Management	103-2	The management approach and its component	Page 31-34	Page 51
Approach	103-3	Evaluation of the management approach	Page 50	Page 51
GRI 414:	414-1	New suppliers that were screened using social	Page 50	Page 51

Supplier Social		criteria		
Assessment				
	Internal	Responsible naturals sourcing projects	Pages 32 and 34	Page 51
	indicator			
		CUSTOMER HEALTH AND	SAFETY	
	103-1	Explanation of the material topic and its	Page 24; page 9 of the materiality report	Page 51
GRI 103:		Boundaries		
Management	103-2	The management approach and its component	Page 24	Page 51
Approach	103-3	Evaluation of the management approach	Page 24	Page 51
GRI 416: Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories (%)	Our Ingredients Index has produced quantifiable data on the environmental and health impact for each of our key ingredients. Over the last years, we have evaluated 413 Index values for 400 unique ingredients representing approximately 93% (by volume) of a typical Firmenich perfumery compound.	Page 51

	MATERIAL TOPICS WITH NO SPECIFIC GRI STANDARDS				
	DMA	Definition	Page number or link	External	
	Indicators			assurance	
		MICROPLASTICS			
GRI 103:	103-1	Explanation of the material topic and its	Pages 9-10 of the materiality report	Page 51	
Management		Boundaries			
Approach	103-2	The management approach and its component	As an emerging and newly identified issue, we	Page 51	
	103-3	Evaluation of the management approach	are looking into this and will define our	Page 51	
Indicator		To be defined	objective(s), management approach and		
			indicator(s) for this issue.		

		GREEN SCIENCE		
GRI 103: Management	103-1	Explanation of the material topic and its Boundaries	Page 46; pages 9 and 11 of the materiality report	Page 51
Approach	103-2	The management approach and its component	Pages 46-47	Page 51
	103-3	Evaluation of the management approach	Page 46	Page 51
Indicator		Productivity and e-factor	Page 47	Page 51
		DEFORESTATION		
GRI 103:	103-1	Explanation of the material topic and its	Page 43; pages 9 and 11 of the materiality	Page 51
Management	103 1	Boundaries	report	l age 31
Approach	103-2	The management approach and its component	Page 43	Page 51
	103-3	Evaluation of the management approach	Page 43	Page 51
Indicator	100 0	CDP ranking on the Forests Program	Page 43	Page 51
CDI 102:	102.1	ENHANCING NUTRITION, HEALTH AND SANITATIO		Page F1
GRI 103:	103-1	Explanation of the material topic and its	Pages 27-28; pages 9-10 of the materiality	Page 51
Management		Boundaries	<u>report</u>	
Approach	103-2	The management approach and its component	Pages 27-28	Page 51
	103-3	Evaluation of the management approach	Pages 27-28	Page 51
Indicator		Sugar, fat and salt reduction	Page 28	Page 51
		Delivery of malodor control systems as products for base of pyramid consumers	Page 26	Page 51
		INVESTMENT IN AND OUTCOMI	ES OF R&D	
GRI 103: Management	103-1	Explanation of the material topic and its Boundaries	Pages 9-10 of the <u>materiality report</u>	Page 51
Approach	103-2	The management approach and its component	As a newly identified issue, we are looking into	Page 51
	103-3	Evaluation of the management approach	this and will define our objective(s),	Page 51
Indicator	1	To be defined	management approach and indicator(s) for this	T -

			issue.	
		CHAMPIONING PRODUCT DEVELOPMENT FOR	ALL MARKET SEGMENTS	
GRI 103:	103-1	Explanation of the material topic and its	Pages 29-30; pages 9-10 of the materiality	Page 51
Management		Boundaries	report	
Approach	103-2	The management approach and its component	Pages 29; 36	Page 51
	103-3	Evaluation of the management approach	Pages 26; 29	Page 51
Indicator		Base of Pyramid consumer insight	Page 26	Page 51
Indicator		Quantitative indicator to be defined	As a newly identified issue, we are looking into defining quantitative appropriate indicator(s) for this issue	
		CUSTOMER REQUIREME	NTS	
GRI 103: Management	103-1	Explanation of the material topic and its Boundaries	Pages 9-10 of the materiality report	Page 51
Approach	103-2	The management approach and its component	Pages 28, 29	Page 51
	103-3	Evaluation of the management approach	Page 26	Page 51
Indicator		Sustainability project developed with customers	Page 26	Page 51
		SECURITY OF SUPPLY OF RAW N	MATERIALS	
GRI 103: Management	103-1	Explanation of the material topic and its Boundaries	Pages 9-10 of the <u>materiality report</u>	Page 51
Approach	103-2	The management approach and its component	Pages 31-34, 45	Page 51
	103-3	Evaluation of the management approach	Pages 31-34, 45	Page 51
Indicator		Naturals Together and Deep Roots partners	Pages 31-34	Page 51
		BUSINESS CONTINUITY MANA	GEMENT	
GRI 103:	103-1	Explanation of the material topic and its	Pages 9-10 of the materiality report	Page 51
Management		Boundaries		

Approach	103-2	The management approach and its component	We have business contingency plans in place to respond to any kind of risks	Page 51
	103-3	Evaluation of the management approach	As a newly identified issue, we're looking into	Page 51
Indicator		To be defined	defining target(s) and appropriate indicator(s)	
			for this issue.	
		PRODUCT SAFETY AND QU	JALITY	
GRI 103:	103-1	Explanation of the material topic and its	Page 24; page 9 of the materiality report	Page 51
Management		Boundaries		
Approach	103-2	The management approach and its component	Page 24	Page 51
	103-3	Evaluation of the management approach	Page 24	Page 51
Indicator		Sales order lines product defect free	Page 24	Page 51
		Improvement in customer quality index	Page 24	Page 51
		Critical remarks on FSSC 22000 Food Safety System certification audits	Page 24	Page 51

	FY17	FY18
Employee and others we	orkers	GRI 401-1
Permanent		
Male	3,957	4,028
Female	2,651	2,736
Temporary		
Male	265	269
Female	172	146
		1
Permanent		
Europe	1417	2,566
India, Middle East & Africa	446	677
North America	885	1,406
South America	508	807
North Asia	418	732
South & East Asia	283	576
Temporary		
Europe	199	280
India, Middle East & Africa	3	8
North America	29	52
South America	15	34
North Asia	7	12
South & East Asia	12	29
		•
Full-time		
Male	4,178	4,251
Female	2,561	2,627
Part-time		
Male	44	46
Female	262	255
	-	1
New employee hires		
Male	496	483
Female	364	354
		1 - 2 - 2
< 30 years	336	301
30-50 years	471	479
> 50 years	53	57
Europe	272	280
India, Middle East & Africa	72	52
North America	185	194
South America	153	141
North Asia	89	107
South & East Asia	69	63
		
New employee hires (%)		
Male	7	7
Female	5	5
< 30 years	5	4
30-50 years	7	7
> 50 years	1	1
Europe	4	4

North America 3 3 3 3 3 5 5 5 5 5	India, Middle East & Africa	1	1
South America 2 2 2 3 5 5 3 3 5 5 5 3 5 5		3	
North Asia			
South & East Asia 1	North Asia		1
Turnover (%) Male 9 11 Female 9 100 30 - 50 years 11 15 30 - 50 years 8 100		1	
Male		<u> </u>	-
Male	Turnover (%)		
Female		9	11
11	Female	9	
30-50 years 8			
30-50 years 8	< 30 years	11	15
Solyears 10		8	10
Europe 6 7 India, Middle East & Africa 7 North America 12 South America 13 North Asia 10 South & East Asia 9 Int South & East Asia 10 Int S		10	11
India, Middle East & Africa 7	,	<u> </u>	
North America	Europe	6	7
South America	India, Middle East & Africa	7	6
North Asia	North America	12	14
Diversity	South America	13	17
Diversity	North Asia	10	11
Employment category; Women	South & East Asia	9	11
Employment category; Women			
Employment category; Women			
Directors 295 320	Diversity		GRI 405-1
Middle managers 1074 1114 Rest of the workforce 1282 1302 Employment category; Men 528 540 Directors 528 1092 Rest of the workforce 2364 2396 Employment category; Women (%)* 2396 Employment category; Women (%)* 50 Rest of the workforce 35 35 Rest of the workforce 35 35 Employment category; Men (%)* 63 Directors 64 63 Middle managers 50 50 Rest of the workforce 65 65 * Rates are calculated per employee categories. 65 * Rates are calculated per employee categories. 65 * Rates are calculated per employee categories. 1 * Executive Board; Women 2 < 30 years	Employment category; Wome	en	
Rest of the workforce 1282 1302 Employment category; Men 528 540 Directors 528 1092 Rest of the workforce 2364 2396 Employment category; Women (%)* Directors 36 37 Middle managers 50 50 Rest of the workforce 35 35 Employment category; Men (%)* 50 64 Directors 64 63 Middle managers 50 50 Rest of the workforce 65 65 ** Rates are calculated per employee categories. 65 Executive Board; Women 0 0 < 30 years	Directors	295	320
Employment category; Men	Middle managers	1074	1114
Directors 528 540	Rest of the workforce	1282	1302
Directors 528 540	Employment category; Men		
Rest of the workforce 2364 2396 Employment category; Women (%)* Directors 36 37 Middle managers 50 Rest of the workforce 35 35 Employment category; Men (%)* Directors 64 63 Middle managers 50 50 Rest of the workforce 65 65 *Rates are calculated per employee categories. Executive Board; Women 0 0 < 30 years		528	540
Rest of the workforce 2364 2396 Employment category; Women (%)* Directors 36 37 Middle managers 50 Rest of the workforce 35 35 Employment category; Men (%)* Directors 64 63 Middle managers 50 50 Rest of the workforce 65 65 *Rates are calculated per employee categories. Executive Board; Women 0 0 < 30 years	Middle managers	1065	1092
Directors 36 37 Middle managers 50 50 Rest of the workforce 35 35 Employment category; Men (%)* 64 63 Directors 64 63 Middle managers 50 50 Rest of the workforce 65 65 * Rates are calculated per employee categories. 65 Executive Board; Women 0 0 < 30 years	Rest of the workforce	2364	2396
Directors 36 37 Middle managers 50 50 Rest of the workforce 35 35 Employment category; Men (%)* 64 63 Directors 64 63 Middle managers 50 50 Rest of the workforce 65 65 * Rates are calculated per employee categories. 65 Executive Board; Women 0 0 < 30 years			
Middle managers 50 Rest of the workforce 35 Employment category; Men (%)* Directors 64 Middle managers 50 Rest of the workforce 65 * Rates are calculated per employee categories. Executive Board; Women < 30 years	Employment category; Wome	en (%)*	
Rest of the workforce 35 35 Employment category; Men (%)* 63 Directors 64 63 Middle managers 50 50 Rest of the workforce 65 65 * Rates are calculated per employee categories. 65 Executive Board; Women 0 0 < 30 years	Directors	36	37
Employment category; Men (%)* 64 63 Directors 64 63 Middle managers 50 50 Rest of the workforce 65 65 * Rates are calculated per employee categories. 65 Executive Board; Women 0 0 < 30 years	Middle managers	50	50
Directors 64 63 Middle managers 50 50 Rest of the workforce 65 65 * Rates are calculated per employee categories. Executive Board; Women < 30 years	Rest of the workforce	35	35
Middle managers 50 Rest of the workforce 65 * Rates are calculated per employee categories. Executive Board; Women < 30 years	Employment category; Men (%)*	
Rest of the workforce 65 65 * Rates are calculated per employee categories. Executive Board; Women < 30 years	Directors	64	63
*Rates are calculated per employee categories. Executive Board; Women	Middle managers	50	50
Executive Board; Women < 30 years	Rest of the workforce	65	65
< 30 years	* Rates are calculated per employee categories.		
< 30 years			
30-50 years 1 1 > 50 years 2 2 Executive Board; Men 0 0 < 30 years			1 -
> 50 years 2 2 Executive Board; Men 0 0 < 30 years			
Executive Board; Men < 30 years			
< 30 years		2	2
30-50 years 3 3			
>50 years 3			
	> 50 years	3	3

Health & Safety*		GRI 403-2
Incidents		
Lost-time injury** (LTIs)	6	5
Total-recordable cases*** (TRC's)	15	15
Lost-time injury rate (LTIR)	0.21	0.21
Fatalities	0	0
Lost-time injury (LTI) by region		
Europe	2	4
India, Middle East & Africa	0	0
North America	0	0
South America	1	1
North Asia	1	0
South & East Asia	2	0
Total recordable cases (TRC) by regi	on	
Europe	5	7
India, Middle East & Africa	0	2
North America	4	5
South America	2	1
North Asia	1	0
South & East Asia	3	0
Lost-time injury (LTI) by gender		
Male	3	5
Female	3	0
Total recordable cases (TRC) by gen	der	
Male	11	12
Female	4	3

^{*}Occupational Health & Safety data covers fixed and temporary headcount including workers supervised by a contractor

^{***} Total recordable cases (TRC) = Total recordable cases per 200,000 exposure hours (this is the sum of lost time cases + restricted work cases + medical treatment, which are either work-related injuries or illnesses).

	Baseline FY15	FY17	FY18
Environment			
CO ₂ Emissions (Tonnes)			GRI 305-1; 305-2
Scope 1: Direct Energy Source (1)	73950.27	75091.74	74010.56
Scope 2: Indirect Source (1)	72059.58	57216.07	54284.91
Total Scope 1 & 2 CO ₂ Emissions (1)	146009.85	132307.81	128295.47
Water footprint reduction in water-stressed area (m³/tonne)	7.2	6.7	6.8

^{**} Lost-time injury rate (LTIR) = Lost-time cases per 200,000 exposure hours (a recordable work-related injury or illness that results in time away from work of greater than one day or one shift following the day of the incident)

Environment			
Energy (GJ)		GRI 30	 02-4
Direct Energy (own source)	1222183.73	1230891.14	
Indirect Energy: purchased	798222.84	844291.46	
(inc. electricity, steam, etc.)			
Total Energy	2020406.56	2075182.60	
. 3.			
Water input (m³)		GRI 30	03-1
Municipal	1306583.01	1395616.13	
Ground	61414.40	66909.61	
Municipal and ground	1367997.41	1462525.75	
Surface	3263691.10	3273072.00	
Recycled/Reused	22581.40	16526.70	
Total	4631688.51	4735597.75	
CO ₂ Emissions (Tonnes)		GRI 30	05-3
Scope 3: Other Indirect			
Sources			
Purchased Goods & Services	3426531	4071421	
(5)			
Transportation & distribution	30548	31317	
(6) Waste generated in	14451	16653	
operations	14451	10053	
Business Travel (7)	16736	17420	
Employee Commuting	28906	30577	
Total Scope 3 CO ₂ Emissions	3517172	4167388	
Others (Tonnes)		GRI 30	05-7
NO _x tonnes	73.89	79.96	
SO _x tonnes	24.12	29.74	
VOC tonnes	233.17	228.48	
Production QTY (Tonnes)	198081.93	212572.12	
Effluent discharge (m³)		GRI 30	06-1
Direct discharge – with on-site			
treatment	688622.96	719570.99	
COD – Direct discharge with			
on-site treatment (Tonnes)	401.12	409.76	
Discharge to off-site municipal			
wastewater system (3)	625764.80	644479.13	
COD – Discharge to off-site			
municipal wastewater system (Tonnes)	1,790.42	1,885.62	
(Tornies)	1,750.42	1,000.02	
Total effluent (m ³) (3)	1314387.76	1364050.12	
Total COD (Tonnes)	2,191.54	2,295.38	
Total COD (Totilles)	2,131.37	2,233.30	
Hazardous (HZ) waste		GRI 30	06.2
Hazaruous (HZ) waste		GRI 30	00-2

Incinerated (without heat recovery)	4628.58	5445.72
Incinerated (with heat recovery)	13318.30	17084.07
Land-filled	11.85	19.23
Other	648.56	892.72
Total hazardous waste	18607.30	23441.74
Non-hazardous (NHZ) waste		GRI 306-2
Incinerated (without heat recovery)	125.27	173.94
Incinerated (with heat recovery)	1363.10	1332.25
Land-filled	1542.92	1278.45
Other	273.09	289.76
Total hazardous waste	3304.37	3074.40
Total waste (HZ & NHZ)		GRI 306-2
Total	21911.66	26516.14
Total incinerated and land- filled	24345.25	28932.92
Total recycled waste (Tonnes)	12850.48	14725.46
Effluent waste		GRI 306-2
Incinerated	2671.41	2654.91
Land-filled	683.83	944.36
Land-application (2)	34.74	39.53
Other	0	0
Total effluent treatment waste	3389.97	3638.79

At times environmental data from previous years is updated, adjusted or corrected. Any changes in environmental data previously published below a 1% threshold are deemed not material unless it is found to be of sufficient importance to our management team, and in these cases the explanation for the variation will be detailed. For cases above 1% the variation will be detailed.

- (1) Restated based on acquisition
- (2) Figure omitted during publication
- (3) Change driven by reporting units error at one site;
 - a. 21.1% decrease, Discharge to off-site municipal wastewater system
 - b. 11.3% decrease, Total effluent

(5) Purchased raw materials used in Firmenich Products. We have adjusted our calculation methodology for this Category. Going forward, we will use primary data from our raw materials suppliers submitted through the annual CDP Supply Chain Request. In addition to data on supplier emissions intensity (tCO2e per revenue) from the CDP Supply Chain Request, we will utilize the total spend on raw materials from suppliers to determine our Category 1 emissions. For suppliers without emissions intensity data reported to CDP, we scaled up our calculated total to include GHG emissions from our entire raw materials supply chain. This will be a cradle to gate approach utilizing Scope 1, 2, & 3 emissions reported by our suppliers.

- (6) Outbound transportation from Firmenich sites to affiliates and customers
- (7) Business air travel only