



We Source – We Make – We Recycle

Global Performance Data

Our 2018 Sustainability Report covers all of IVL's sites and business units around the world, including PET, Feedstock (PTA, PIA, EO/EG, PX, NDC), Fibers, Packaging, Recycling and wool as listed below.

Information on Operations Included in the 2018 Sustainability Report

Region	Country	Business
Americas		
AlphaPet, Inc.	USA	●
Auriga Polymers Inc.	USA	● ●
FiberVisions Manufacturing Company	USA	●
FiberVisions Products, Inc.	USA	●
Indorama Ventures (Oxide & Glycols) LLC	USA	●
Indorama Ventures Polymers Mexico, S. de R.L. de C.V.	Mexico	● ●
Indorama Ventures Polymeros S.A.	Brazil	●
Indorama Ventures PTA Montreal LP	Canada	●
Indorama Ventures Xylenes and PTA LLC	USA	● ● ● ●
Performance Fibers Operations Mexico, S. de R.L. de C.V.	Mexico	●
PHP Fibers Inc.	USA	●
StarPet Inc.	USA	●
Winnsboro Fibres LLC	USA	●
Europe		
Beverage Plastics Limited	UK	●
FiberVisions A/S	Denmark	●
Glanzstoff Bohemia s.r.o.	Czech Republic	●
Glanzstoff Industries S.R.L.	Italy	●
Glanzstoff Longjumeau S.A.S.	France	●
Indorama Ventures Corlu PET Sanayi Anonim Sirketi	Turkey	●
Indorama Ventures Europe B.V.	The Netherlands	● ●
Indorama Ventures Poland Sp. z o.o.	Poland	●
Indorama Ventures Portugal PTA – Unipessoal, LDA.	Portugal	●
Indorama Ventures Quimica S.L.U.	Spain	● ● ● ●
PHP Fibers GmbH	Germany	●
Textilcord Steinfurt S.A.*	Luxembourg	●
Trevira GmbH, Bobingen	Germany	●
Trevira GmbH, Guben	Germany	●
UAB Orion Global Pet	Lithuania	●
Wellman France Recyclage S.A.S	France	●
Wellman International Limited, Ireland	Ireland	●
Wellman International Limited, The Netherlands	The Netherlands	●
Asia		
Asia Pet (Thailand) Limited	Thailand	●
FiberVisions (China) Textiles Products Limited	China	●
Glanzstoff Industries (Qingdao) Co., Ltd.	China	●
Guangdong IVL PET Polymer Company Limited	China	●
Indorama Holdings Limited	Thailand	●
Indorama Petrochem Limited	Thailand	●
Indorama Petrochem Limited (2 nd Branch)	Thailand	●
Indorama Polyester Industries Public Company Limited, Nakhon Pathom	Thailand	● ●
Indorama Polyester Industries Public Company Limited, Rayong	Thailand	● ●
Indorama Ventures Packaging (Myanmar) Limited	Myanmar	●
Indorama Ventures Packaging (Philippines) Corporation, Bacolod	The Philippines	●
Indorama Ventures Packaging (Philippines) Corporation, Batino	The Philippines	●
Indorama Ventures Packaging (Philippines) Corporation, Davao	The Philippines	●
Indorama Ventures Packaging (Philippines) Corporation, Meycauayan	The Philippines	●
Indorama Ventures Packaging (Philippines) Corporation, MOP	The Philippines	●

Region	Country	Business
Performance Fibers (Kaiping) Company Limited	China	●
Performance Fibers (Kaiping) No.2 Company Limited	China	●
Petform (Thailand) Limited, Korat	Thailand	●
Petform (Thailand) Limited, Lopburi	Thailand	● ●
Petform (Thailand) Limited, Pathumthani	Thailand	●
Petform (Thailand) Limited, Rayong	Thailand	●
PT Indorama Petrochemicals	Indonesia	●
PT Indorama Polychem Indonesia	Indonesia	●
PT Indorama Polypet Indonesia	Indonesia	●
PT Indorama Ventures Indonesia	Indonesia	● ●
TPT Petrochemicals Public Company Limited	Thailand	●
Africa		
Egyptian Indian Polyester Company S.A.E.	Egypt	●
Indorama PET (Nigeria) Limited	Nigeria	●
Indorama Ventures Packaging (Ghana) Limited	Ghana	●
Indorama Ventures Packaging (Nigeria) Limited	Nigeria	●

Remarks:

● Feedstock ● PTA ● PET ● Fibers ● Packaging ● Recycling ● Wool

NDC = Naphthalene Dicarboxylate

PIA = Purified Isophthalic Acid

* One of the three Glanzstoff sites, the other two are Glanzstoff Bohemia and Glanzstoff Industries

Coverage of Data Collection (% of IVL's Total Global Production)

Material Indicators	2015	2016	2017	2018
Total energy consumption	100	100	100	100
Direct GHG Emissions Scope 1	99.6	100	100	100
Indirect GHG Emissions Scope 2	99.7	100	100	100
Total NO _x Emissions	84.1	95.2	100	100
Total SO _x Emissions	77.3	83.9	100	100
Total VOC Emissions	63.6	77.4	100	100
Total waste (excluding reuse and recycle)	99.6	100	100	100
COD in treated wastewater discharged	77.3	93.5	100	100
BOD in treated wastewater discharged	NA	83.9	100	100
Total water withdrawn by sources	100	100	100	100
Wastewater discharge	NA	98.4	100	100
Health & safety	100	100	100	100
Process safety events	10	10	30	50
Spills	65	88	100	100
CSR	60	79	91	94
HR	75.8	100	100	100

Global EHS Data

GRI Standards		Unit	2015	2016	2017	2018
Production						
General	Total production (captive consumption)	Ton of production	7,481,352	9,479,184	10,004,534	11,338,992
	PET	Ton	3,544,468	3,632,085	3,648,922	4,211,040
	PTA	Ton	2,153,836	3,412,773	3,735,362	4,192,671
	Packaging	Ton	82,596	113,202	134,838	155,319
	Fibers	Ton	1,134,341	1,344,039	1,320,941	1,438,564
	Feedstock (e.g. EG/EO)	Ton	361,709	872,173	1,057,123	1,236,703
	Wool	Ton	3,077	2,673	2,188	2,712
	Recycling (flakes)	Ton	108,958	102,239	105,160	101,983
	Others	Ton	92,366	0	0	0
Revenue						
General	Total revenues (including inter-company sales)	USD (million)	7,192	8,655	10,575	12,933
Materials						
301-1	Total material used	Ton	7,881,517	9,846,945	10,656,101	11,418,542
	Raw materials					
	- PTA	Ton	3,482,025	3,802,674	4,061,686	4,281,652
	- MEG	Ton	1,603,761	1,453,127	1,492,315	1,647,427
	- Paraxylene	Ton	-	2,271,643	2,452,829	2,755,828
	- Acetic Acid	Ton	-	124,232	139,606	162,234
	- Purified isophthalic acid	Ton	-	44,479	64,042	70,510
	- PET	Ton	-	302,352	259,809	302,396
	- PP	Ton	-	131,853	123,825	118,622
	- PE	Ton	-	32,504	37,193	67,172
	- HDPE	Ton	-	4,538	5,481	7,134
	- Wool	Ton	-	2,938	2,521	2,600
	- Cardboard packaging	Ton	-	11,096	39,556	3,516
	- Partially oriented yarn (POY) + Textile grade chips	Ton	-	24,506	21,150	0
	Bio-raw materials					
	- Bio-MEG	Ton	15,694	10,718	7,447	15,808
	- Cellulose	Ton	-	-	11,043	11,004
	- PLA	Ton	-	-	2,383	1,088
	Others	Ton	2,780,037	1,490,979	1,791,707	1,830,309
301-2	Recycled materials (bottles to flakes)	Ton	128,890	139,306	143,507	141,242
Energy						
302-1	Total energy consumption	GJ	41,467,851	51,219,219	55,070,650	59,984,717
	• Fuel oil	GJ	219,851	289,919	89,531	109,772
	• Natural Gas	GJ	16,392,113	21,725,557	23,905,980	28,089,267
	• LPG	GJ	58,300	43,109	71,919	60,629
	• Diesel	GJ	23,005	66,716	90,493	150,835
	• Gasoline	GJ	2,802	32,272	31,971	30,422
	• Fuel gas	GJ	-	9,945	31,676	7,709
	• Coal	GJ	12,376,449	14,436,785	13,921,799	14,143,189
	• Other	GJ	24,376	463,662	27,371	101,404
	• Renewable energy consumption	GJ	544,511	885,249	1,348,403	1,324,546
	Biomass	GJ	227,034	373,656	855,872	901,065
	Biogas	GJ	317,477	511,593	492,531	423,481
	• Direct energy sold	GJ	-	(1,276,304)	(1,416,948)	(1,961,330)
	Total indirect energy consumption (electricity, cooling, steam purchased from outside of IVL group)	GJ	9,875,986	14,542,309	16,968,455	17,928,274
		MWh	3,222,334	4,115,769	4,713,460	4,980,076
	- Electricity purchased from conventional Sources (e.g. natural gas, coal, nuclear, heating oil)	GJ	9,408,898	11,486,827	11,934,309	12,684,116
		MWh	2,613,583	3,190,785	3,315,086	3,523,366
	- Purchased steam	GJ	2,151,325	2,238,688	3,763,243	3,723,250
		MWh	597,590	621,858	1,045,345	1,034,236
	- Purchased heating	GJ	-	805,571	414,514	428,143
		MWh	-	223,770	115,143	118,929
	- Purchased cooling	GJ	-	133,308	371,063	300,998
		MWh	-	37,030	103,073	83,611
	- Renewable electricity generated and consumed	GJ	-	6,278	6,237	6,072
		MWh	-	1,744	1,733	1,687
	- Renewable electricity purchased through certificate	GJ	40,180	149,558	1,221,327	1,423,629
		MWh	11,161	41,544	339,257	395,453

GRI Standards		Unit	2015	2016	2017	2018
	Total direct electricity sold	GJ	698,158	86,376	421,526	417,225
		MWh	193,933	23,993	117,091	115,896
	Total steam sold	GJ	1,026,259	188,085	257,933	165,745
		MWh	285,072	52,246	71,648	46,040
	Total indirect electricity sold	GJ	-	3,461	62,778	54,964
		MWh	-	961	17,438	15,268
302-3	Energy intensity	GJ/Ton of production	5.54	5.40	5.50	5.29
302-4	Energy saved due to conservation and efficiency improvements	GJ	413,342	786,520	614,892	416,617
Water Withdrawal and Consumption						
303-1	Total water withdrawn (by sources)	m ³	38,200,946	46,295,100	53,552,616	60,285,763
	- Surface water	m ³	18,472,443	28,612,964	32,036,781	34,920,909
	- Once through cooling water	m ³	2,736,178	1,245,728	2,533,355	1,681,646
	- Municipal water and water utilities	m ³	10,602,732	10,632,287	13,630,142	18,229,684
	- Groundwater	m ³	6,351,455	5,761,373	5,263,939	5,341,836
	- Rainwater	m ³	38,140	42,748	88,398	111,689
	Water intensity	m ³ /Ton of production	5.12	4.88	5.35	5.32
Reused/Recycled Water						
303-3	Total volume of recycled/reused water	m ³	2,780,405	3,053,241	4,699,568	5,292,534
	% of recycled/reused water	%	7.28	6.60	8.78	8.78
Emissions						
305-1	Direct GHG emissions from all sources owned or controlled by the company (Scope 1 emissions)	tCO ₂ e	2,226,176	3,109,687	3,211,409	3,688,970
305-2	Indirect GHG emissions resulting from the generation of electricity, heat, or steam (Scope 2 emissions)	tCO ₂ e	1,842,432	1,979,668	2,316,591	2,224,494
	Total GHG emissions (Scope 1 + Scope 2)	tCO ₂ e	4,068,608	5,089,356	5,528,000	5,913,464
305-4	Scope 1 GHG Intensity	tCO ₂ e/Ton of production	0.298	0.328	0.321	0.325
	Scope 2 GHG Intensity	tCO ₂ e/Ton of production	0.246	0.2088	0.2316	0.1962
	Scope 1 + Scope 2 GHG Intensity	tCO ₂ e/Ton of production	0.544	0.537	0.553	0.522
	GHG Intensity in tons of CO ₂ e per currency total revenue	tCO ₂ e/USD (million)	309.54	588.02	522.74	457.24
	GHG Intensity in tons of CO ₂ e per full time equivalent (FTE) employees	tCO ₂ e/FTE	173.00	352.64	363.80	371.41
305-7	Total NO _x emissions	Ton	2,430	1,642	2,559	2,879
	Total SO _x emissions	Ton	1,075	927	1,518	1,970
	Total VOC emissions	Ton	1,149	2,042	2,078	4,642
Wastewater Discharge						
306-1	Total water discharge volume	m ³	12,940,673	22,131,959	32,222,930	33,659,202
	COD in treated wastewater discharged	Ton	446	1,164	1,542	2,357
	BOD in treated wastewater discharged	Ton	58	112	100	357
	TSS in treated wastewater discharged	Ton	1,577	1,659	295	478
	Oil and grease in treated wastewater discharged	Ton	17		15.6	16.7
	COD in untreated wastewater discharged to a third party	Ton		3,781	4,090	4,374
	BOD in untreated wastewater discharged to a third party	Ton		1,602	888	793
	TSS in untreated wastewater discharged to a third party	Ton		1,034	421	302
	Oil and grease in treated wastewater discharged	Ton		4.04	8.01	5.4
Solid Waste						
306-2	Total hazardous waste	Ton	34,229	47,448	54,001	51,379
	- Reuse	Ton	819	720	30,248	28,959
	- Recycling	Ton	12,545	12,037	4,725	2,960
	- Recovery (including energy recovery)	Ton	782	2,153	1,748	2,188
	- Composting	Ton	13	43	-	-
	- Incineration	Ton	4,151	4,860	11,183	9,616
	- Landfill	Ton	1,684	2,348	5,376	7,349
	- Others	Ton	14,234	25,288	721	306
	Total non-hazardous waste	Ton	83,730	100,300	110,151	119,570
	- Reuse	Ton	1,829	5,864	5,810	7,960
	- Recycling	Ton	39,728	28,221	36,616	43,990
	- Recovery (including energy recovery)	Ton	11,460	5,642	5,919	11,959
	- Composting	Ton	720	6,143	5,911	6,850
	- Incineration	Ton	819	779	1,367	1,080
	- Landfill (General waste)	Ton	16,681	27,831	35,746	38,609
	- Others	Ton	12,494	25,820	18,781	9,122
	Total Reused, Recycled and Recovered Waste	Ton	67,162	54,637	85,066	98,017
Total waste disposed (not Reused, Recycled or Recovered)	Ton	50,797	93,112	79,086	72,932	
306-4	Total weight of hazardous waste transported	Ton	32,873	43,869	57,724	48,388
	Total weight of hazardous waste treated	Ton	6,594	6,724	5,530	5,985
	The total weight of hazardous waste shipped internationally	Ton	8	25	183	362

GRI Standards		Unit	2015	2016	2017	2018
Spills						
306-3	Total significant spills	Case	41	38	42	18
		Ton	94	90	513	28
	- Hydrocarbon spills	Case	0	2	4	5
		Ton	0	0	7	12.9
	- Chemical spills	Case	30	31	26	13
		Ton	89	50	30	15.2
	- Other spills	Case	11	5	12	0
	Ton	4	39	476	0	
Process Safety						
	Tier 1					
	- No. of events	Case	0	0	5	8
	- Rate	Case/Million man-hours	0	0	0.48	0.43
	Tier 2					
	- No. of events	Cases	0	1	3	4
	- Rate	Case/Million man-hours	0	0.31	0.29	0.215
Environmental Compliance						
307-1	ALL FINES: Monetary value of ALL fines for non-compliance with environmental laws and regulations	USD	205	260	54,618	36,607
	FINES OVER USD 10,000: Monetary value of significant fines over USD 10,000 for non-compliance with environmental laws and regulations	USD	0	0	42,866	36,607
	Total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Case	4	2	0	0
	Total number of non-monetary sanctions for non-compliance with environmental laws and regulations that were incurred	Case	4	2	0	0
Employees						
102-8	Total Employees	Person	12,868	14,432	15,195	15,922
	- Male	Person	10,080	11,257	11,844	12,524
	- Female	Person	2,788	3,175	3,351	3,398
	Total Contractors	Person	1,837	2,811	2,115	3,234
	- Male	Person	1,437	2,277	1,704	2,730
	- Female	Person	400	534	411	504
Occupational Health and Safety						
403-1	Total workforce represented in formal joint management-worker health and safety committees	Person	2,772	3,650	12,461	13,118
	Percentage of workforce represented in formal joint management-worker health and safety committees	%	22	25	82	82
403-2	Total Recordable Injury rate (TRIR) (per 200,000 man-hours)	No/200,000 man-hours	1.57	1.00	1.19	1.29
	Employees	No/200,000 man-hours	1.57	1.05	1.21	1.41
	- Male	No/200,000 man-hours	1.65	1.12	1.41	1.52
	- Female	No/200,000 man-hours	1.21	0.77	0.50	0.98
	Contractors	No/200,000 man-hours	1.55	0.80	1.10	0.78
	- Male	No/200,000 man-hours	1.79	0.94	1.35	0.87
	- Female	No/200,000 man-hours	0.34	0.00	0.00	0.33
	Total Recordable Injury (not including first aid incidents)	Case	214	151	206	241
	Employees	Case	186	126	176	214
	- Male	Case	161	109	160	184
	- Female	Case	25	17	16	30
	Contractors	Case	28	25	30	27
	- Male	Case	27	25	30	25
	- Female	Case	1	0	0	2
	Lost Time Injury Frequency Rate (LTIFR) (per million man-hours)	No/Million man-hours	3.67	2.95	3.61	3.71
	Employees	No/Million man-hours	3.60	3.18	3.98	4.16
	- Male	No/Million man-hours	3.49	3.13	4.40	4.47
	- Female	No/Million man-hours	3.80	3.40	2.49	2.93
	Contractors	No/Million man-hours	4.15	2.08	1.65	1.73
	- Male	No/Million man-hours	4.97	2.44	2.03	1.92
	- Female	No/Million man-hours	0.0	0.0	0.0	0.82
	Total Lost-Time Injuries	Case	100	89	125	138
Employees	Case	85	76	116	126	
- Male	Case	68	61	100	108	
- Female	Case	17	15	16	18	
Contractors	Case	15	13	9	12	
- Male	Case	15	13	9	11	
- Female	Case	0	0	0	1	

GRI Standards		Unit	2015	2016	2017	2018
403-3	Occupational Illness Frequency Rate (OIFR)	No/Million man-hours	0.04	0.066	0.145	0
	Employees	No/Million man-hours	0	0.0837	0.0343	0
	- Male	No/Million man-hours	0	0.1026	0.0440	0
	- Female	No/Million man-hours	0	0	0	0
	Contractors	No/Million man-hours	0	0	0.734	0
	- Male	No/Million man-hours	0	0	0.9023	0
	- Female	No/Million man-hours	0	0	0	0
	Total number of occupational disease cases	Case	1	2	5	0
	Employees	Case	1	2	1	0
	- Male	Case	1	2	1	0
	- Female	Case	0	0	0	0
	Contractors	Case	0	0	4	0
	- Male	Person	0	0	4	0
	- Female	Person	0	0	0	0
	Fatalities (all employees and contractors)	Person	0	0	0	0
	Employees	Person	0	0	0	0
	- Male	Person	0	0	0	0
	- Female	Person	0	0	0	0
	Contractors	Person	0	0	0	0
	- Male	Person	0	0	0	0
	- Female	Person	0	0	0	0
	Lost day rate (LDR)	Days/Million man-hours	83	42	51	66
	Employees	Days/Million man-hours	87	47	51	77
	- Male	Days/Million man-hours	99	43	58	87
	- Female	Days/Million man-hours	27	62	28	37
	Contractors	Days/Million man-hours	56	26	47	17
	- Male	Days/Million man-hours	37	30	57	17
	- Female	Days/Million man-hours	151	0	0	17
	Total number of lost days (only including lost scheduled work days)	Man Days	2,252	1,275	1,754	2,452
	Employees	Man Days	2,049	1,116	1,499	2,336
	- Male	Man Days	1,939	842	1,322	2,106
	- Female	Man Days	110	273	177	230
	Contractors	Man Days	203	160	255	116
	- Male	Man Days	113.0	160	255	95
	- Female	Man Days	90.0	-	-	21
	Absentee rate (AR)	%	1.8	2.2	2.1	2.0
	Employees	%	2.0	2.6	2.4	2.4
	- Male	%	1.9	2.39	2.37	2.34
	- Female	%	2.6	3.55	2.38	2.65
	Contractors	%	0.2	0.7	0.4	0.3
- Male	%	0.2	0.54	0.29	0.29	
- Female	%	0.2	1.61	0.71	0.46	
Absentee days	Days	62,870	83,206	88,825	93,668	
Employees	Days	61,870	77,779	86,318	90,871	
- Male	Days	46,916	58,178	67,179	70,527	
- Female	Days	14,954	19,601	19,139	20,344	
Contractors	Days	1,000	5,427	2,507	2,797	
- Male	Days	860	3,577	1,609	2,098	
- Female	Days	140	1,850	898	699	
Near Miss	Case		720	959	1,870	
Employees	Case		643	861	1,750	
- Male	Case		575	726	1,611	
- Female	Case		68	135	139	
Contractors	Case		77	98	120	
- Male	Case		68	90	118	
- Female	Case		9	8	2	
Workers with high incidence or high risk of diseases related to their occupation	Person	114	882	402	744	
Employees	Person	81	825	307	703	
- Male	Person	81	789	307	587	
- Female	Person	0	36	0	116	
Contractors	Person	33	57	95	41	
- Male	Person	33	54	91	37	
- Female	Person	0	3	4	4	

Global Human Resources Data

GRI Standards		Unit	2015	2016	2017	2018
Employees						
102-8	Total employees by gender	Person	12,868	14,432	15,195	15,922
	- Male	Person	10,080	11,257	11,844	12,524
	- Female	Person	2,788	3,175	3,351	3,398
	Total permanent employees	Person	12,273	13,769	14,525	15,221
	- Male	Person	9,583	10,718	11,299	11,944
	- Female	Person	2,690	3,051	3,226	3,277
	Total temporary employees	Person	595	663	670	701
	- Male	Person	497	539	545	580
	- Female	Person	98	124	125	121
102-8	Total employees by level*	Person	12,273	13,769	14,525	15,221
405-1	• Executive Management	Person	79	88	94	101
	- Male	Person	71	79	83	88
	- Female	Person	8	9	11	13
	• Senior Management	Person	330	369	388	414
	- Male	Person	256	286	301	320
	- Female	Person	74	83	87	94
	• Middle Management	Person	1,257	1,409	1,485	1,619
	- Male	Person	1,006	1,125	1,185	1,281
	- Female	Person	251	284	300	338
	• Junior Management	Person	5,156	5,778	6,106	5,831
	- Male	Person	3,602	4,028	4,246	3,521
	- Female	Person	1,554	1,750	1,860	2,310
	• Non - Management*	Person	5,451	6,125	6,452	7,256
	- Male	Person	4,648	5,200	5,484	6,734
	- Female	Person	803	925	968	522
	Total employees by age*	Person	12,273	13,769	14,525	15,221
	• Over 50 years old	Person	1,709	2,153	2,488	3,328
	- Male	Person	1,399	1,810	2,118	2,742
	- Female	Person	310	343	370	586
	• 30-50 years old	Person	7,480	8,222	8,542	9,024
	- Male	Person	5,784	6,210	6,412	6,896
	- Female	Person	1,696	2,012	2,130	2,128
	• Below 30 years old	Person	3,084	3,394	3,495	2,869
	- Male	Person	2,400	2,698	2,769	2,306
	- Female	Person	684	696	726	563
New employee hires*						
401-1	Total new employees	Person	1,645	1,484	1,732	1,758
	- Male	Person	1,292	1,054	1,274	1,216
	- Female	Person	353	430	458	542
	Total new employee hire rate	New hire rate (%)	13.40	10.78	11.92	11.55
	- Male	New hire rate (%)	13.48	9.83	11.28	10.18
	- Female	New hire rate (%)	13.12	14.09	14.20	16.54
	Total new employees by age	Person	1,645	1,484	1,732	1,758
	• Over 50 years old	Person	96	102	99	93
	- Male	Person	90	93	80	74
	- Female	Person	6	9	19	19
	• 30-50 years old	Person	626	691	698	754
	- Male	Person	501	500	485	497
	- Female	Person	125	191	213	257
	• Below 30 years old	Person	923	691	935	911
	- Male	Person	701	461	709	645
	- Female	Person	222	230	226	266
	Total new employee hire rate by age	New hire rate (%)	13.40	10.78	11.92	11.55
	• Over 50 years old	New hire rate (%)	5.62	4.74	3.98	2.79
	- Male	New hire rate (%)	6.43	5.14	3.78	2.70
	- Female	New hire rate (%)	1.94	2.62	5.14	3.24
	• 30-50 years old	New hire rate (%)	8.37	8.40	8.17	8.36
	- Male	New hire rate (%)	8.66	8.05	7.56	7.21
	- Female	New hire rate (%)	7.37	9.49	10.00	12.08

GRI Standards		Unit	2015	2016	2017	2018	
401-1	• Below 30 years old	New hire rate (%)	29.93	20.36	26.75	31.75	
	- Male	New hire rate (%)	29.21	17.09	25.60	27.97	
	- Female	New hire rate (%)	32.46	33.05	31.13	47.25	
Employee Turnover*		Full time employees					
401-1	Total employee turnover	Person	1,094	909	861	896	
	- Male	Person	884	676	665	671	
	- Female	Person	210	233	196	225	
	Total employee turnover rate	Turnover rate (%)	8.91	6.60	5.93	5.89	
	- Male	Turnover rate (%)	9.22	6.31	5.89	5.62	
	- Female	Turnover rate (%)	7.81	7.64	6.08	6.87	
	Total employee turnover by age	Person	1,094	909	861	896	
	• Over 50 years old	Person	160	172	195	255	
	- Male	Person	128	132	157	203	
	- Female	Person	32	40	38	52	
	• 30-50 years old	Person	511	438	414	364	
	- Male	Person	401	314	319	252	
	- Female	Person	110	124	95	112	
	• Below 30 years old	Person	423	299	252	277	
	- Male	Person	355	230	189	216	
	- Female	Person	68	69	63	61	
	Employee turnover rate by age	Turnover rate (%)					
	Total employee turnover rate by age	Turnover rate (%)	8.91	6.60	5.93	5.89	
	• Over 50 years old	Turnover rate (%)	9.36	7.99	7.84	7.66	
	- Male	Turnover rate (%)	9.15	7.29	7.41	7.40	
	- Female	Turnover rate (%)	10.32	11.66	10.27	8.87	
	• 30-50 years old	Turnover rate (%)	6.83	5.33	4.85	4.03	
	- Male	Turnover rate (%)	6.93	5.06	4.98	3.65	
	- Female	Turnover rate (%)	6.49	6.16	4.46	5.26	
	• Below 30 years old	Turnover rate (%)	13.72	8.81	7.21	9.65	
	- Male	Turnover rate (%)	14.79	8.52	6.83	9.37	
	- Female	Turnover rate (%)	9.94	9.91	8.68	10.83	
	Voluntary employee turnover	Person	888	807	680	815	
	Voluntary employee turnover rate	Turnover rate (%)	7.24	5.86	4.68	5.35	
	Number of employee laid off	Person	0	89	113	81	
	- Male	Person	0	89	107	69	
	- Female	Person	0	0	6	12	
	Number of negotiations	Person	61	28	35	36	
Parental Leave*							
401-3	Number of employees entitled for parental leave	Person	4,334	5,448	8,382	9,750	
	- Male	Person	3,402	4,299	6,114	7,429	
	- Female	Person	932	1,149	2,268	2,321	
	Number of employees who took parental leave	Person	188	224	368	768	
	- Male	Person	116	149	264	543	
	- Female	Person	72	75	104	225	
	Number of employees who returned to work after taking parental leave	Person	172	194	345	639	
	- Male	Person	107	143	257	494	
	- Female	Person	65	51	88	145	
	Return to work rate (after parental leave)	%	91	86.61	93.75	83.20	
	- Male	%	92	95.97	97.35	91	
	- Female	%	90	68	84.62	64	
	Retention to work (after parental leave and still employed for the next 12 months)	Person	167	171	325	603	
	- Male	Person	105	131	239	465	
	- Female	Person	62	40	86	138	
	Retention Rate (after parental leave and still employed for the next 12 months)	%	97.09	88.14	94	100	
	- Male	%	98.13	91.61	93	94.13	
	- Female	%	95.38	78.43	98	95.17	
	Employees training*						
	404-1	Total training hours provided to employees	Hour	186,914	284,356	329,779	463,175
		- Male	Hour	141,557	211,450	247,584	352,338
- Female		Hour	45,357	72,906	82,195	110,837	
Total average training hours		Hour/Employee	15.2	20.7	22.7	30.43	
- Male		Hour/Employee	14.8	19.7	21.9	29.5	
- Female		Hour/Employee	16.9	23.9	25.5	33.8	

GRI Standards		Unit	2015	2016	2017	2018
404-1	Total training hours by management category	Hour	186,914	284,356	329,779	463,175
	• Executive Management	Hour	2,060	2,349	2,676	3,077
	– Male	Hour	1,835	2,077	2,324	2,675
	– Female	Hour	225	272	352	402
	• Senior Management	Hour	7,381	8,537	9,489	10,687
	– Male	Hour	5,825	6,717	7,228	7,987
	– Female	Hour	1,556	1,820	2,261	2,700
	• Middle Management	Hour	19,493	23,726	32,629	38,734
	– Male	Hour	14,775	17,979	26,023	29,034
	– Female	Hour	4,718	5,747	6,606	9,700
	• Non - management	Hour	86,993	115,958	144,175	200,014
	– Male	Hour	65,901	88,521	111,341	145,014
	– Female	Hour	21,092	27,437	32,834	55,000
	– Female	Hour	70,987	133,786	140,810	210,663
	– Male	Hour	53,221	96,156	100,668	167,628
	– Female	Hour	17,766	37,630	40,142	43,035
Performance Review*						
404-3	Total employees receiving regular performance reviews	Person	8,123	13,769	14,525	15,221
	• Executive Management	Person	79	88	94	101
	• Senior Management	Person	330	369	388	414
	• Middle Management	Person	1,257	1,409	1,485	1,619
	• Junior Management	Person	4,300	5,778	6,106	5,831
	• Non - Management	Person	2,157	6,125	6,452	7,256
	Percentage of employees receiving regular performance reviews	%	66.19	100	100	100
	• Executive Management	%	100	100	100	100
	• Senior Management	%	100	100	100	100
	• Middle Management	%	100	100	100	100
	• Junior Management	%	83	100	100	100
	• Non - Management	%	40	100	100	100
	Total employees receiving career development reviews	Person	7,806	12,514	14,242	14,237
	• Executive Management	Person	79	88	94	101
	• Senior Management	Person	330	369	388	414
	• Middle Management	Person	1,257	1,409	1,485	1,619
	• Junior Management	Person	4,300	5,778	6,106	5,831
	• Non - Management	Person	1,840	4,870	6,169	6,272
	Percentage of employees receiving career development reviews	%	63.60	90.89	98.05	93.54
	• Executive Management	%	100	100	100	100
	• Senior Management	%	100	100	100	100
	• Middle Management	%	100	100	100	100
• Junior Management	%	83.4	100	100	100	
• Non - Management	%	33.8	79.5	95.6	86.4	
Remuneration ratio of women to men						
405-2	Strategic	Ratio	0.860	0.950	0.960	0.960
	Managerial	Ratio	0.910	0.931	0.944	0.945
	Supervisory and Operational	Ratio	0.890	0.912	0.929	0.930
Employee Engagement Score*						
	Employee engagement score	%	85.92	86.02	90.68	90.97
	– Male	%	82.98	82.62	93.20	93.28
	– Female	%	88.91	89.39	89.90	90.01
	Data coverage of employee engagement survey		90.42	93.50	93.75	93.43
	– Male	% of male employees	89.80	93.40	93.60	93.1
	– Female	% of female employees	91.10	93.31	93.98	93.8
Collective Bargaining						
102-41	Total employees covered by collective bargaining agreements	Person	4,391	6,948	7,748	7,810
	Percentage of total employees covered by collective bargaining agreements	%	34.12	48.14	50.99	51.31
	Number of consultations/negotiations with trade unions over organizational changes [unit]	Number	56	65	94	334
Human Rights Integration						
412-2	Total number of hours of employees training on human rights policies or procedures concerning aspects of human rights that are relevant to operations	Hour	3,251	9,269	14,256	17,210
	Total number of employees trained in human rights policies or procedures concerning aspects of human rights that are relevant to operations	Person	3,832	7,997	11,403	12,819

GRI Standards		Unit	2015	2016	2017	2018
412-2	Percentage of employees trained in human rights policies or procedures concerning aspects of human rights that are relevant to operations	% of total employees	29.8	55.4	75.0	80.5
Non-discrimination						
406-1	Total number of incidents of discrimination and corrective actions taken	Case	1	2	4	0
	Number of incidents of discrimination and corrective actions taken regarding employees	Case	1	1	3	0
	Number of incidents of discrimination and corrective actions taken to all excluding employees	Case	0	1	1	0
Security Practices						
410-1	Total number of security personnel trained in the organization's human rights policies or procedures that are relevant to operations [unit]	Person	89	405	332	305
	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations [%]	%	41.98	87.85	88.30	86.65
	Total number of security personnel	Person	212	461	376	352
Rights of Indigenous Peoples						
411-1	Incidents of violations involving rights of indigenous people	Case	0	0	0	0
Human Rights Assessment						
412-1	Total number of operations	Number	59	69	83	91
	Total number of operations that have been subject to human rights reviews or impact assessments	Number	59	69	83	91
	Percentage of operations that have been subject to human rights reviews or impact assessments [unit]	%	99.00	100	100	100
Human Rights Grievances						
103-2	Total number of grievances concerning human rights through the formal grievance process	Case	0	0	0	0
	Number of grievances about human rights (related to employees) through the formal grievance process	Case	0	0	0	0
	Number of grievance about human rights (not related to employees) through the formal grievance process	Case	0	0	0	0
	Total number of human rights grievances addressed in this reporting period	Case	0	0	0	0
	Number of human rights grievances (related to employees) addressed during the reporting period	Case	0	0	0	0
	Number of human rights grievances (not related to employees) addressed during the reporting period	Case	0	0	0	0
	Total number of human rights grievances filed in the previous reporting period that were resolved during the reporting period	Case	0	0	0	0
	Number of human rights grievances (related to employees) filed in the previous reporting period that were resolved during the reporting period	Case	0	0	0	0
	Number of human rights grievances (not related to employees) filed in the previous reporting period that were resolved during the reporting period	Case	0	0	0	0
Labor Practice Grievances						
103-2	Total number of grievances about labor practices filed through the formal grievance mechanism	Case	45	41	26	27
	Total number of grievances about labor practices addressed during the reporting period	Case	48	44	16	25
	Total number of grievances about labor practices resolved during the reporting period	Case	36	32	12	18
	Total number of grievances about labor practices filed prior to the reporting period that were resolved during the reporting period	Case	27	24	15	21

* Does not include temporary manpower. Temporary manpower is contingent manpower hired through an agency. Appropriate compliance training on Human Rights, Health & Safety has always been given to temporary manpower.

Global CSR Data

GRI Standards		Unit	2015	2016	2017	2018
Local Community Engagement						
413-1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	%	50	73.1	89.6	67
	Total number of operations with any of the below local community engagement, impact assessments and developed programs (e.g. if site A has SIA and EIA, and site B has EIA the total number of sites with programs is 2)	Number	15	18	15	29
	Number of operation with implemented social impact assessment including gender assessment	Number	4	4	11	10
	Number of operation with implemented environmental impact assessment	Number	12	14	20	21
	Number of operation with implemented public disclosure of results of environmental and social impact assessment	Number	8	9	13	12
	Number of operation with implemented local community development programs	Number	6	10	17	18
	Number of operation with implemented stakeholder engagement plans	Number	4	9	14	13
	Number of operation with implemented broad base local community consultation committees and processes	Number	4	4	9	10
	Number of operation with implemented works councils, occupational health and safety committees and other employee representation bodies to deal with impacts	Number	14	12	20	21
	Number of operation with implemented formal local community grievance process	Number	8	6	12	3
Social Grievances						
	Number of grievances regarding society received through the formal grievance process	Number	7	4	1	1
	Total number of societal grievances addressed during this reporting period	Number	7	4	0	0
	Total number of societal grievances resolved during this reporting period	Number	7	4	0	0
	Total number of societal grievances resolved in the previous reporting period	Number	6	1	4	1
Total philanthropic activities						
	Total philanthropic activities	%	100	100	100	100
	Charitable donations	USD	221,921	131,135	888,367	970,856
	Community investments	USD	89,863	445,808	645,634	971,420
	Commercial Initiatives in the community	USD	203,214	77,239	325,003	406,629
Philanthropic contributions						
	Total cash contributions	USD	486,298	546,010	1,749,830	1,771,435
	Time: Estimated employee costs	USD	38,961	866,390	1,918,393	1,007,502
	Time: Employee volunteering during paid working hours	Hour	2,516	53,102	103,681	58,640
	Total in-kind giving	USD	15,937.20	79,923.86	93,160.48	122,914.06
	Total management overheads	USD	12,587.54	32,687.70	16,012.59	454,556.05

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INDORAMA VENTURES PUBLIC COMPANY LIMITED

75/102 Ocean Tower 2, 37th Floor,
Soi Sukhumvit 19 (Wattana), Bangkok 10110 Thailand
Telephone: +662 661 6661 Fax: +662 661 6664-5
www.indoramaventures.com