

Segment Analysis (US\$)

Performance by Segments

	2016	2017	2018	LTM 2Q18	LTM 2Q19	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19
IVL Operating Rate (%)	86%	88%	88%	89%	86%	87%	92%	87%	86%	85%	87%
PET	84%	88%	88%	89%	86%	87%	92%	89%	84%	89%	83%
Fibers & Yarns	88%	88%	93%	91%	91%	95%	97%	93%	89%	89%	93%
West Feedstock	88%	87%	85%	88%	83%	84%	88%	82%	86%	75%	89%
Asia PTA	85%	88%	91%	91%	90%	88%	96%	86%	92%	91%	89%
IVL Effective Capacity (MMT)	10.18	10.38	11.85	10.72	13.54	2.66	2.77	3.15	3.27	3.50	3.63
PET	4.52	4.24	4.86	4.39	5.72	1.09	1.16	1.31	1.30	1.50	1.60
Fibers & Yarns	1.57	1.56	1.66	1.56	1.84	0.38	0.39	0.44	0.45	0.47	0.48
West Feedstock	2.71	3.20	3.83	3.39	4.23	0.85	0.88	1.05	1.05	1.06	1.07
Asia PTA	1.37	1.37	1.50	1.37	1.75	0.34	0.34	0.35	0.47	0.46	0.47
IVL Production (MMT)	8.73	9.10	10.42	9.56	11.66	2.33	2.55	2.73	2.82	2.97	3.15
PET	3.80	3.73	4.27	3.92	4.92	0.95	1.07	1.16	1.09	1.34	1.33
Fibers & Yarns	1.38	1.37	1.55	1.42	1.67	0.36	0.38	0.41	0.40	0.41	0.45
West Feedstock	2.38	2.80	3.25	2.98	3.51	0.72	0.78	0.86	0.90	0.80	0.95
Asia PTA	1.17	1.20	1.36	1.24	1.57	0.30	0.33	0.30	0.43	0.42	0.42
IVL Core EBITDA(\$t)	89	110	138	132	119	140	153	150	113	102	114.81
PET	75	79	138	120	123	123	169	154	103	109	126.80
Fibers & Yarns	148	152	155	152	160	152	153	136	181	186	138.99
West Feedstock	96	173	166	181	122	207	168	174	125	78	108.77
Asia PTA	36	15	53	22	65	9	55	92	56	36	83.07
IVL Core EBITDA (M\$)	775	1,004	1,441	1,262	1,392	326	388	409	318	304	361
PET	286	296	588	471	606	116	180	179	113	145	169
Fibers & Yarns	205	208	240	216	266	55	58	55	72	77	62
West Feedstock	229	484	541	541	428	148	130	150	112	62	104
Asia PTA	42	18	72	28	101	3	18	28	24	15	35
Holding	13	(2)	1	5	(10)	4	3	(3)	(3)	4	(8)
*IVL Net Revenue (M\$)	7,215	8,438	10,741	9,341	11,668	2,414	2,618	2,920	2,788	3,030	2,930
PET	3,825	4,295	5,644	4,862	6,377	1,228	1,436	1,540	1,440	1,730	1,667
Fibers & Yarns	2,077	2,389	3,069	2,697	3,344	727	713	794	835	873	842
West Feedstock	1,926	2,597	3,354	2,830	3,440	726	790	958	880	808	794
Asia PTA	731	810	1,203	906	1,420	231	260	306	406	362	346
Intercompany	(1,344)	(1,653)	(2,529)	(1,954)	(2,913)	(498)	(582)	(677)	(773)	(743)	(720)

*Note: Net Revenue by Factory location basis

Performance by Portfolio

IVL Production (MMT)	8.73	9.10	10.42	9.56	11.66	2.33	2.55	2.73	2.82	2.97	3.15
High Value Add (HVA)	1.72	1.84	2.16	1.97	2.27	0.50	0.53	0.57	0.56	0.55	0.59
Special Position (West Necessities)	4.21	4.62	5.35	4.88	5.96	1.15	1.30	1.47	1.44	1.44	1.61
Cyclical (East Necessities)	2.81	2.64	2.91	2.72	3.43	0.68	0.72	0.69	0.82	0.97	0.95
IVL Core EBITDA(\$t)	89	110	138	132	119	140	153	150	113	102	115
High Value Add (HVA)	218	287	247	273	195	268	258	233	232	183	134
Special Position (West Necessities)	63	83	124	115	113	133	136	139	90	95	127
Cyclical (East Necessities)	44	36	85	59	83	53	102	109	74	63	91
IVL Core EBITDA (M\$)	775	1,004	1,441	1,262	1,392	326	388	409	318	304	361
High Value Add (HVA)	373	529	532	538	443	133	136	132	131	101	79
Special Position (West Necessities)	266	382	662	559	675	153	176	204	130	137	204
Cyclical (East Necessities)	123	95	246	159	284	36	74	76	61	62	86
Holding	13	(2)	1	5	(10)	4	3	(3)	(3)	4	(8)
*IVL Net Revenue (M\$)	7,215	8,438	10,741	9,341	11,668	2,414	2,618	2,920	2,788	3,030	2,930
High Value Add (HVA)	2,635	3,137	3,914	3,511	4,161	914	965	1,005	1,030	1,096	1,029
Special Position (West Necessities)	2,972	3,532	4,598	3,876	4,982	991	1,107	1,314	1,186	1,227	1,255
Cyclical (East Necessities)	1,608	1,769	2,229	1,954	2,525	509	547	602	571	706	646

*Note: Net Revenue by Factory location basis

Performance by Regions

IVL Production (MMT)	8.73	9.10	10.42	9.56	11.66	2.33	2.55	2.73	2.82	2.97	3.15
America	3.05	3.41	3.74	3.56	3.78	0.83	0.94	1.03	0.94	0.87	0.94
Europe, Middle East & Africa (EMEA)	2.46	2.62	3.27	2.84	3.65	0.70	0.76	0.84	0.88	0.91	1.02
Asia	3.22	3.07	3.41	3.16	4.23	0.79	0.85	0.85	0.99	1.19	1.19
IVL Core EBITDA(\$t)	89	110	138	132	119	140	153	150	113	102	115
America	114	130	193	160	177	193	176	198	207	159	141
Europe, Middle East & Africa (EMEA)	75	134	102	140	80	137	144	114	35	68	101
Asia	71	69	113	91	104	83	132	131	96	83	112
IVL Core EBITDA (M\$)	775	1,004	1,441	1,262	1,392	326	388	409	318	304	361
America	348	445	724	569	670	161	165	204	194	138	133
Europe, Middle East & Africa (EMEA)	185	350	332	399	292	95	110	96	31	62	103
Asia	230	212	385	288	440	66	111	112	96	99	133
Holding	13	(2)	1	5	(10)	4	3	(3)	(3)	4	(8)
*IVL Net Revenue (M\$)	7,215	8,438	10,741	9,341	11,668	2,414	2,618	2,920	2,788	3,030	2,930
America	2,710	3,148	4,181	3,447	4,482	873	992	1,194	1,122	1,085	1,082
Europe, Middle East & Africa (EMEA)	2,293	2,783	3,381	3,134	3,482	831	863	881	806	909	886
Asia	2,211	2,507	3,179	2,760	3,703	710	764	845	860	1,036	962

*Note: Net Revenue by Factory location basis

Performance by 5 Segments

IVL Operating Rate (%)	86%	88%	88%	89%	86%	87%	92%	87%	86%	85%	87%
Integrated PET (PET + PTA + Px + Recycling)	88%	89%	88%	90%	87%	87%	93%	86%	86%	88%	89%
Integrated Oxides and Derivatives (IVOL + IVOG)	74%	87%	94%	102%	70%	99%	94%	86%	96%	22%	75%
Specialty Chemicals (NDC, IPA, Specialty PET)	73%	74%	85%	77%	76%	81%	83%	90%	84%	78%	57%
Packaging	65%	66%	61%	59%	70%	56%	61%	59%	65%	76%	80%
Fibers	88%	88%	94%	91%	92%	96%	97%	95%	88%	91%	93%
IVL Effective Capacity (MMT)	10.18	10.38	11.85	10.72	13.54	2.66	2.77	3.15	3.27	3.50	3.63
Integrated PET (PET + PTA + Px + Recycling)	7.51	7.65	8.89	7.90	10.27	1.96	2.06	2.39	2.48	2.65	2.74
Integrated Oxides and Derivatives (IVOL + IVOG)	0.55	0.55	0.55	0.55	0.55	0.14	0.14	0.14	0.14	0.14	0.14
Specialty Chemicals (NDC, IPA, Specialty PET)	0.69	0.72	0.76	0.75	0.91	0.19	0.19	0.19	0.19	0.25	0.27
Packaging	0.14	0.18	0.27	0.22	0.28	0.06	0.06	0.07	0.07	0.07	0.07
Fibers	1.30	1.28	1.38	1.29	1.54	0.31	0.32	0.36	0.38	0.39	0.41
IVL Production (MMT)	8.73	9.10	10.42	9.56	11.66	2.33	2.55	2.73	2.82	2.97	3.15
Integrated PET (PET + PTA + Px + Recycling)	6.59	6.84	7.80	7.12	8.98	1.70	1.91	2.05	2.14	2.33	2.45
Integrated Oxides and Derivatives (IVOL + IVOG)	0.41	0.48	0.52	0.56	0.39	0.13	0.13	0.12	0.13	0.03	0.10
Specialty Chemicals (NDC, IPA, Specialty PET)	0.50	0.54	0.65	0.58	0.69	0.15	0.16	0.17	0.16	0.19	0.16
Packaging	0.09	0.12	0.16	0.13	0.19	0.04	0.04	0.04	0.05	0.05	0.06
Fibers	1.15	1.12	1.29	1.17	1.42	0.30	0.31	0.34	0.33	0.36	0.38
IVL Core EBITDA(\$t)	89	110	138	132	119	140	153	150	113	102	115
Integrated PET (PET + PTA + Px + Recycling)	58	61	101	83	98	83	116	125	80	82	107
Integrated Oxides and Derivatives (IVOL + IVOG)	160	303	450	407	338	545	440	433	380	84	248
Specialty Chemicals (NDC, IPA, Specialty PET)	217	427	245	350	129	318	281	251	137	101	18
Packaging	318	308	294	338	305	297	338	277	270	317	342
Fibers	154	161	164	162	171	161	158	143	193	194	156
IVL Core EBITDA (M\$)	775	1,004	1,441	1,262	1,392	326	388	409	318	304	361
Integrated PET (PET + PTA + Px + Recycling)	384	414	791	592	882	142	222	256	171	192	262
Integrated Oxides and Derivatives (IVOL + IVOG)	65	145	232	227	130	73	57	52	50	3	26
Specialty Chemicals (NDC, IPA, Specialty PET)	108	229	158	203	88	48	44	44	22	19	3
Packaging	29	37	48	44	59	11	13	11	13	16	19
Fibers	176	1									