

IVL Year end installed Capacities based on announcements made												
Years	2010A	2011A	2012A	2013A	2014A	2015A	2016A	2017A	2018A	2019A	Yr '19 % of IVL	2020E
Qty in Kt												
Consolidated in the Company												
PET Nec	1,593	2,698	3,062	2,966	3,080	3,704	3,681	3,485	4,407	5,366	37%	5,326
Asia	269	743	849	839	988	1,310	1,088	1,038	1,103	1,779	12%	1,854
EMEA	640	793	1,064	1,064	1,101	1,354	1,541	1,414	1,734	2,060	14%	2,065
America	684	1,162	1,149	1,063	992	1,041	1,052	1,033	1,570	1,528	10%	1,406
PTA	1,750	1,750	1,761	1,761	1,764	2,357	3,698	4,018	4,911	4,981	34%	4,995
Asia	1,373	1,373	1,384	1,384	1,373	1,377	1,373	1,873	1,881	1,881	13%	1,886
EMEA	377	377	377	377	391	380	705	1,025	1,735	1,735	12%	1,739
America	-	-	-	-	-	600	1,620	1,620	1,303	1,365	9%	1,369
RECYCLING	-	153	166	228	282	324	411	366	369	465	3%	612
Asia	-	-	-	-	28	28	29	28	28	28	0%	29
EMEA	-	153	153	153	157	163	175	175	196	198	1%	186
America	-	-	13	75	97	133	208	162	144	238	2%	397
PX Merchant	-	-	-	-	-	-	-	-	-	194	1%	194
America	-	-	-	-	-	-	-	-	-	194	1%	194
IVOG	-	-	550	550	550	550	550	550	550	550	4%	550
America	-	-	550	550	550	550	550	550	550	550	4%	550
IVOL	-	-	-	-	-	-	-	-	-	113	1%	113
America	-	-	-	-	-	-	-	-	-	113	1%	113
PET HVA	-	478	488	498	585	491	473	596	511	627	4%	617
Asia	-	20	30	40	40	40	59	95	82	62	0%	66
EMEA	-	-	-	-	40	40	38	37	35	185	1%	185
America	-	458	458	458	504	411	376	374	394	381	3%	367
IPA	-	-	-	-	-	-	220	220	220	440	3%	441
EMEA	-	-	-	-	-	-	220	220	220	220	1%	221
America	-	-	-	-	-	-	-	-	220	220	1%	220
NDC	-	-	-	-	-	-	-	27	27	27	0%	27
America	-	-	-	-	-	-	-	27	27	27	0%	27
PACKAGING	-	-	-	-	80	110	139	182	320	276	2%	294
Asia	-	-	-	-	46	69	83	121	175	111	1%	116
EMEA	-	-	-	-	34	40	56	62	145	165	1%	178
America	-	-	-	-	-	-	-	-	-	-	0%	-
Fibers (Polyester, PP, Nylon 66 etc)	300	409	646	809	1,162	1,234	1,292	1,332	1,512	1,634	11%	1,663
Asia	300	409	439	482	761	806	831	785	809	825	6%	841
EMEA	-	-	90	210	264	257	272	337	443	467	3%	462
America	-	-	117	117	137	171	189	209	260	342	2%	360
Fibers (Wool)	6	6	6	6	6	6	6	6	9	9	0%	9
Asia	6	6	6	6	6	6	6	6	6	6	0%	6
EMEA	-	-	-	-	-	-	-	-	4	3	0%	4
IVL	3,649	5,494	6,679	6,818	7,510	8,776	10,470	10,692	13,056	14,682	100%	14,840
ASIA	1,948	2,551	2,708	2,751	3,243	3,636	3,468	3,447	4,075	4,692	32%	4,797
EMEA	1,017	1,323	1,684	1,804	1,987	2,235	3,007	3,270	4,513	5,032	34%	5,039
America	684	1,620	2,287	2,263	2,280	2,905	3,995	3,975	4,468	4,959	34%	5,003
Integrated PET (PET + PTA + Recycling)	3,343	4,601	4,989	4,955	5,127	6,385	7,790	7,869	9,687	11,007	75%	11,127
ASIA	49%	46%	45%	45%	47%	43%	32%	31%	31%	34%		34%
EMEA	30%	29%	32%	32%	32%	30%	31%	33%	38%	36%		36%
America	20%	25%	23%	23%	21%	28%	37%	36%	31%	30%		30%
Olefins (IVOG + IVOL)	-	-	550	550	550	550	550	550	550	663	5%	663
ASIA	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%
EMEA	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%
America	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%		100%
Specialty Chemicals (Specialty PET, IP)	-	478	488	498	585	491	693	753	978	1,094	7%	1,085
ASIA	0%	4%	6%	8%	7%	8%	9%	13%	8%	6%		6%
EMEA	0%	0%	0%	0%	7%	8%	37%	34%	26%	37%		37%
America	0%	96%	94%	92%	86%	84%	54%	53%	66%	57%		57%
PACKAGING	-	-	-	-	80	110	139	182	320	276	2%	294
ASIA	0%	0%	0%	0%	58%	63%	60%	66%	55%	40%		40%
EMEA	0%	0%	0%	0%	42%	37%	40%	34%	45%	60%		60%
America	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%
FIBERS TOTAL	306	415	652	815	1,168	1,240	1,298	1,338	1,521	1,642	11%	1,672
ASIA	100%	100%	68%	60%	66%	65%	64%	59%	54%	51%		51%
EMEA	0%	0%	14%	26%	23%	21%	21%	25%	29%	29%		28%
America	0%	0%	18%	14%	12%	14%	15%	16%	17%	21%		22%

Joint Ventures-Equity Accounting (% of IVL share)

Joint Ventures	-	-	-	-	227	230	604	605	369	50		50
PET NEC	-	-	-	-	-	-	348	349	349	-		-
ASIA	-	-	-	-	-	-	348	349	349	-		-
PTA	-	-	-	-	215	218	236	236	-	-		-
ASIA	-	-	-	-	215	218	236	236	-	-		-
FIBERS	-	-	-	-	12	12	20	20	20	50		50
ASIA	-	-	-	-	12	12	20	20	20	20		20
America	-	-	-	-	-	-	-	-	-	30		30

Theoretical RM requirement on 2019 capacity @ 90% utilization										
INDORAMA										
PTA	MEG	PX	IPA	PTA	MEG	PX	IPA			
Requirement				Production						
3,988	1,662		95							
1,345	560		32							
1,488	620		35							
1,155	481		28							
		2,959		4,483			648			
		1,117		1,693						
		1,030		1,561						
		811		1,229			648			
178	74		4							
22	9									
155	65		4							
								297		
								297		
476	198									
47	19									
140	58									
289	120									
									396	
									198	
									198	
768	313		10							
592	241		1							
95	39		3							
81	33		6							
5,409	2,245	2,959	109	4,483	297	648	396			
2,005	830	1,117	33	1,693						
1,723	717	1,030	39	1,561					198	
1,681	699	811	37	1,229	297	648			198	
Raw Material (RM) Integration %	PTA Global Integration %							83%		
	MEG Global Integration %							13%		
	PX Global Integration %							22%		
	IPA Global Integration %							100%		
	Theoretical PTA buying in KT							926		
	Theoretical MEG buying in KT							1,948		
Theoretical PX buying in KT							2,311			
Theoretical IPA buying in KT							-			
Theoretical RM buying in KT							5,185			