

IVL Year end installed Capacities based on announcements made

Years	2017A	2018A	Yr '18 % of IVL	2019E	2020E	2021E	2022E
Qty in Kt							
Consolidated in the Company							
Oxide & Glycols	550	550	4%	550	550	550	550
America	550	550	4%	550	550	550	550
Mix Feed Cracker	-	-	0%	113	113	113	113
America	-	-	0%	113	113	113	113
PET Resins	4,070	4,990	38%	5,918	6,091	6,074	6,074
China	523	569	4%	502	520	518	518
Europe	1,378	1,401	11%	1,432	1,436	1,432	1,432
Indonesia	197	201	2%	203	204	203	203
MENA	73	369	3%	603	677	675	675
America	1,486	2,036	16%	2,042	2,058	2,052	2,052
India	-	-	0%	699	701	699	699
Thailand	414	414	3%	436	495	494	494
PET Packaging	182	320	2%	276	294	325	339
Fibers (Polyester, PP, Nylon 66 etc)	1,618	1,809	14%	1,845	1,870	1,907	1,910
China	65	114	1%	122	123	124	124
Europe	513	604	5%	618	601	623	625
Indonesia	436	404	3%	406	407	406	406
MENA	-	35	0%	35	35	35	35
America	292	332	3%	339	364	380	382
India	-	10	0%	10	20	20	20
Thailand	312	309	2%	315	320	319	319
PTA	4,018	4,911	38%	4,981	4,995	4,981	4,981
Europe	1,025	1,735	13%	1,735	1,739	1,735	1,735
Indonesia	-	500	4%	508	509	508	508
America	1,620	1,303	10%	1,365	1,369	1,365	1,365
Thailand	1,373	1,373	11%	1,373	1,377	1,373	1,373
Purified Isophthalic Acid (IPA)	220	440	3%	440	441	440	440
Europe	220	220	2%	220	221	220	220
America	-	220	2%	220	220	220	220
Fibers (Wool)	6	9	0%	9	9	9	9
Europe	-	4	0%	3	4	4	4
Thailand	6	6	0%	6	6	6	6
IVL	10,665	13,029	100%	14,131	14,362	14,398	14,416
ASIA	32%	31%		33%	33%	33%	33%
EMEA	31%	35%		34%	34%	34%	34%
America	37%	34%		33%	33%	33%	32%

PET Incl. Pckg	4,253	5,310	41%	6,194	6,384	6,399	6,413
ASIA	30%	26%		32%	32%	32%	32%
EMEA	36%	36%		36%	36%	36%	36%
America	35%	38%		33%	32%	32%	32%
Fibers & Yarns (Incl. Wool)	1,624	1,818	14%	1,854	1,870	1,916	1,920
ASIA	50%	46%		46%	47%	46%	46%
EMEA	32%	35%		35%	34%	35%	35%
America	18%	18%		18%	19%	20%	20%
Feedstock	4,788	5,901	45%	6,084	6,098	6,084	6,084
ASIA	29%	32%		31%	31%	31%	31%
EMEA	26%	33%		32%	32%	32%	32%
America	45%	35%		37%	37%	37%	37%
PTA	4,018	4,911	38%	4,981	4,995	4,981	4,981
ASIA	34%	28%		28%	28%	28%	28%
EMEA	26%	35%		35%	35%	35%	35%
America	40%	27%		27%	27%	27%	27%
Purified Isophthalic Acid (IPA)	220	440	3%	440	441	440	440
Europe	100%	50%		50%	50%	50%	50%
America	-	50%		50%	50%	50%	50%
EOEG	550	550	4%	550	550	550	550
America	100%	100%		100%	100%	100%	100%
Mix Feed Cracker	-	-	0%	113	113	113	113
North America (Project Houston)		#DIV/0!		100%	100%	100%	100%

Joint Ventures-Equity Accounting (% of IVL share)

Joint Ventures	605	369	100%	20	20	20	20
PET	349	349	95%	-	-	-	-
India	349	349	95%	-	-	-	-
Fibers & Yarns	20	20	5%	20	20	20	20
China	12	12	3%	12	12	12	12
Thailand	7	7	2%	7	7	7	7
PTA	236	-	0%	-	-	-	-
Indonesia	236	-	0%	-	-	-	-

Theoretical RM requirement

on 2019 capacity @ 90% utilization							
PTA	MEG	PX	IPA	PTA	MEG	PX	IPA
Requirement				Production			
				297			
				297			
4,405	1,835		105				
379	158		9				
1,083	451		26				
154	64		4				
387	161		9				
1,544	643		37				
528	220		13				
330	137		8				
792	322						
56	23						
95	39						
314	128						
-	-						
82	33						
-	-						
244	99						
		2,959		4,483		648	
		1,030		1,561			
		302		457			
		811		1,229		648	
		816		1,236			
							396
							198
							198
5,197	2,158	2,959	105	4,483	297	648	396
2,005	830	1,117	33	1,693	-	-	-
1,565	651	1,030	35	1,561	-	-	198
1,626	677	811	37	1,229	297	648	198

Raw Material (RM) Integration %	PTA Global Integration %	86%
	MEG Global Integration %	14%
	IPA Global Integration %	100%
	PX Global Integration %	22%
	Theoretical PTA buying in KT	714
	Theoretical MEG buying in KT	1,861
	Theoretical PX buying in KT	2,311
	Theoretical IPA buying in KT	-
Theoretical RM buying in KT	4,885	

400kt of Ethylene & 40kt of Propylene