

REPUBLIC OF CHINA

The Petrochemical Industry of Taiwan, ROC

2014 Global Economic Outlook

Global economy activity strengthened during the second half of 2013 and is expected to improve further in 2014-15. Global growth is now projected to be slightly higher in 2014, at around 3.7 %, rising to 3.9 % in 2015. Amid this, the advanced economies continue to recover except Euro area. The United States is expected to grow at 2.8 % in 2014, but the growth in Euro area under 1 %.The developing economies are expected to increase to 5.1 percent in 2014 and to 5.4 percent in 2015. Growth in China rebounded strongly in the second half of 2013, due largely to an acceleration in investment. This surge is expected to slow down, in part because of policy measures aimed at slowing credit growth and raising the cost of capital. Growth is thus expected to moderate around 7 % in 2014, as illustrated in table 1.

Table 1. Economic Growth Rate (%) in Selected Regions & Countries

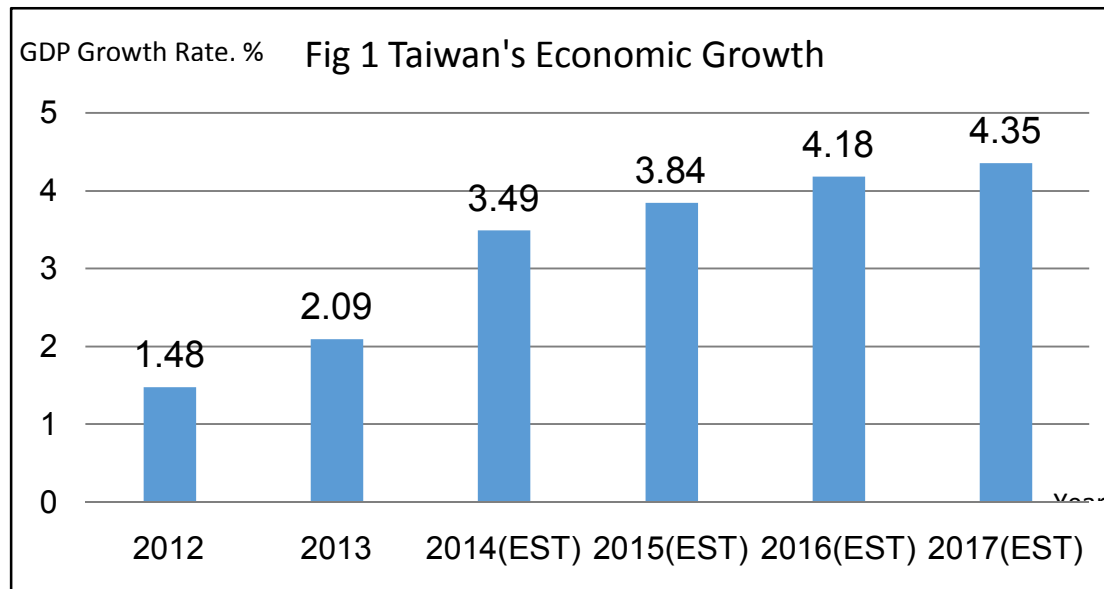
Source : IMF

	2012	2013	2014(EST)	2015(EST)	2016(EST)	2017(EST)
World	3.37	3.28	3.7	3.85	4.04	4.07
USA	2.32	2.22	2.8	3.09	3.03	2.95
Euro Area	-0.66	-0.43	0.83	1.35	1.7	1.71
Japan	1.46	1.52	0.89	0.83	0.84	0.91
China	7.65	7.7	7.38	7.09	6.84	6.63
Taiwan	1.48	2.09	3.49	3.84	4.18	4.35
India	4.74	5.02	5.63	6.35	6.46	6.63

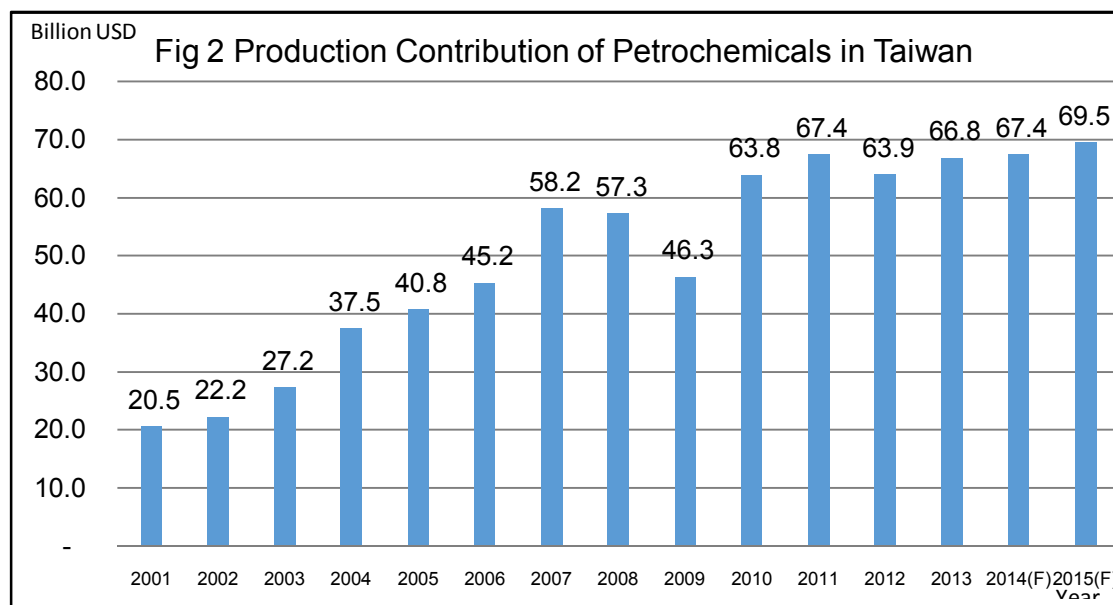
Thailand	6.49	2.89	0.96	4.62	4.4	4.32
Indonesia	6.26	5.78	5.16	5.49	5.8	6.0

Taiwan Economic and petrochemical industry Outlook

Economic figures showed Taiwan GDP growth in 2014 is expected to speed up to 3.49%. As the global economy is heading to recovery, Taiwan is forecast to grow 3.84 % in 2015, as shown in Figure 1. Consumer Price Index (CPI) increased 1.19 % in 2014 but Whole- sale price index (WPI) decreased 0.1 % due to energy price plunged. Even though global economy continues to grow but Inflation pressure will be contained because oil price drops continuously.



2014 Taiwan petrochemical industry production values increased to 67.3 billion dollars as global economic recovery stimulated petrochemical demand. But CPC No.5 cracker shutdown unexpectedly in Q2 and Kaohsiung gas explosion accident happened in Q3, as well as global oil prices fell synchronized downturn in petrochemicals and other factors, which made our 2014 petrochemical output value of only modest growth, as shown in Figure 2.



The 2014 Petrochemical Industry Situations in Taiwan Overview

The production of six basic raw materials and twenty four major petrochemical intermediates totaled 28,746,671 metric tons, and decrease of 1.1% over the previous year, according to PIAT statistics, as indicated in Table 2. The decrease of production

value and volume was a result of CPC No.5 cracker shutdown unexpectedly and FPCC No.3 cracker turnaround in Q3. The total import was down by 5.9 % whereas the total demand was down 2.6 % in 2014, compared with 2013.

Table 2. Supply and Demand for Major Petrochemicals in Taiwan

		2013	2014	Growth
Basic Material	Production	11,798,593	12,237,015	3.7%
	Import	3,039,169	2,531,824	-16.7%
	Export	2,621,066	2,976,383	13.6%
	Demand	12,216,696	11,792,456	-3.5%
Intermediates	Production	17,267,064	16,509,656	-4.4%
	Import	3,341,021	3,470,466	3.9%
	Export	8,190,882	7,769,443	-5.1%
	Demand	12,417,203	12,210,679	-1.7%
Total	Production	29,065,657	28,746,671	-1.1%
	Import	6,380,190	6,002,290	-5.9%
	Export	10,811,948	10,745,826	-0.6%
	Demand	24,633,899	24,003,135	-2.6%

Demand= Production+ Import- Export Unit: Metric ton

While Taiwan's downstream derivative producers and converters have invested heavily in China for almost two decades, the Taiwan government has long restricted the investment in upstream in China. This policy was lifted in January, 2014. Gulei petrochemical project planned in Fujian Province of China is the first one that has been approved by Taiwan Government. Initially they are fully integrated from refinery through naphtha cracker to downstream plants. But now they have gave up refinery investment and separate the naphtha cracker into two sectors, one is naphtha feed, the other is methanol feed.

Basic Raw materials

The supply & demand statistics for petrochemical basic raw materials is illustrated in Table 3. The production of ethylene, propylene, butadiene, benzene, toluene, all increased to certain extents in 2014 except that of xylenes with a minor setback. The imports of ethylene, propylene, butadiene, toluene and xylenes declined while imports of benzene grew. Exports of ethylene, propylene, butadiene, benzene and toluene increased in 2014, compared with 2013, however export of xylene receded. The apparent domestic demands for all basic raw materials registered positive growth for ethylene, butadiene and benzene in 2014, negative growth for propylene, toluene and xylenes. Taiwan became a net exporter for all basic raw materials except for butadiene and benzene.

Petrochemical Intermediates

Table 2 also indicates the supply & demand of 24 petrochemical intermediates in 2013&2014. The production and export all decreased to certain extent in 2014, mainly attributed to CPL & PTA.

Synthetic Resins or Plastics

The supply & demand statistics for plastics are summarized in Table 4. The production of six commodity plastics all showed negative growth in 2014 over the previous year.

Raw materials for Synthetic Fibers

Supply & demand balance of materials for synthetic fibers is depicted in Table 5. Materials AN/MEG showed positive sign in production/export in 2014. CPL continued to be in far short supply in 2013/2014 and relied heavily on import. Due to PTA

substantial expansion projects in China within the past two years and import tax difference between Taiwan & ASEAN made Taiwan PTA producers slashed production/export volume in 2013/2014.

Synthetic Rubbers

Table 6 summarized supply & demand for synthetic rubbers in 2013/ 2014. In 2014, the production of SBR amounted to 97,945 MT, up by 13.8% over the previous year and the production of BR increased 6.4% to 63,540 MT. Domestic demand of SBR increased by 6.6% and that of BR shrank to a larger extent of 83.2%.

Table 3. Supply and Demand for Basic Petrochemicals in Taiwan

		2013	2014	Growth
Ethylene	Production	3,925,325	4,182,340	6.5%
	Import	254,440	130,877	-48.6%
	Export	193,643	199,211	2.9%
	Demand	3,986,122	4,114,006	3.2%
Propylene	Production	3,047,400	3,237,323	6.2%
	Import	245,872	144,305	-41.3%
	Export	522,271	829,598	58.8%
	Demand	2,771,001	2,552,030	-7.9%
Butadiene	Production	545,953	585,097	7.2%
	Import	128,426	127,705	-0.6%
	Export	92,225	107,787	16.9%
	Demand	582,154	605,015	3.9%

Benzene	Production	1,725,922	1,793,826	3.9%
	Import	708,956	760,183	7.2%
	Export	0	68,000	
	Demand	2,434,878	2,486,009	2.1%
Toluene	Production	76,019	285,659	275.8%
	Import	372,106	241,307	-35.2%
	Export	69,227	281,620	306.8%
	Demand	378,898	245,346	-35.2%
Xylene	Production	2,477,974	2,152,770	-13.1%
	Import	1,329,369	1,127,447	-15.2%
	Export	1,743,700	1,490,167	-14.5%
	Demand	2,063,643	1,790,050	-13.3%
Total	Production	11,798,593	12,237,015	3.7%
	Import	3,039,169	2,531,824	-16.7%
	Export	2,621,066	2,976,383	13.6%
	Demand	12,216,696	11,792,456	-3.5%

Demand= Production+ Import- Export Unit: Metric ton

Table 4. Supply and Demand for Plastics in Taiwan

		2013	2014	Growth
LDPE/LLLD/EVA	Production	588,571	576,133	-2.1%
	Import	271,777	290,637	6.9%
	Export	464,458	416,823	-10.3%
	Demand	395,890	449,947	13.7%
HDPE	Production	560,121	524,555	-6.3%
	Import	76,987	78,261	1.7%
	Export	329,079	303,446	-7.8%
	Demand	308,029	299,370	-2.8%
PVC	Production	1,621,111	1,514,893	-6.6%
	Import	22,522	26,643	18.3%
	Export	1,068,876	975,206	-8.8%
	Demand	574,757	566,330	-1.5%
PP	Production	1,208,987	1,042,198	-13.8%
	Import	154,331	175,081	13.4%
	Export	790,067	660,063	-16.5%
	Demand	573,251	557,216	-2.8%
PS	Production	828,031	775,078	-6.4%
	Import	8,508	7,743	-9.0%
	Export	760,927	723,916	-4.9%
	Demand	75,612	58,905	-22.1%

ABS	Production	1,210,159	1,201,685	-0.7%
	Import	10,231	13,167	28.7%
	Export	1,095,372	1,046,874	-4.4%
	Demand	125,018	167,978	34.4%

Demand= Production+ Import- Export Unit: Metric ton

Table 5. Supply and Demand for Synthetic Fibers in Taiwan

		2013	2014	Growth
CPL	production	272,700	227,200	-16.7%
	import	444,515	442,950	-0.4%
	export	8,704	0	-100.0%
	demand	708,511	670,150	-5.4%
AN	production	458,211	464,511	1.4%
	import	97,820	110,181	12.6%
	export	175,752	184,852	5.2%
	demand	380,279	389,840	2.5%
PTA	production	2,929,805	2,596,260	-11.4%
	import	21	0	-100.0%
	export	497,718	208,724	-58.1%
	demand	2,432,108	2,387,536	-1.8%
EG	production	2,112,419	2,298,600	8.8%

	import	311,130	204,556	-34.3%
	export	1,323,431	1,482,794	12.0%
	demand	1,100,118	1,020,362	-7.2%

Demand= Production+ Import- Export Unit: Metric ton

Table 6. Supply and Demand for Synthetic Rubbers

		2013	2014	Growth
SBR	production	86,076	97,945	13.8%
	import	48,485	38,377	-20.8%
	export	67,647	64,969	-4.0%
	demand	66,914	71,353	6.6%
BR	production	59,705	63,540	6.4%
	import	29,415	27,276	-7.3%
	export	73,442	88,185	20.1%
	demand	15,678	2,631	-83.2%
CB	production	90,378	93,163	3.1%
	import	69,851	81,544	16.7%
	export	37,006	40,338	9.0%
	demand	123,223	134,369	9.0%

Demand= Production+ Import- Export Unit: Metric ton

Prospects

As 2015 Q1 petrochemicals demand in Asia rebounded, so did the prices. Buyers re-entered market to replenish the stock after Chinese lunar New Year. The escalating up in petrochemical prices and business confidence triggered industry-wide re-stocking, as well as producers cutback in the production of petrochemicals because of turnaround schedule. The outlook of petrochemical industry depends upon many factors, such as global economy development, outlook of crude oil prices, and supply & demand situation of each different derivatives...etc. According to latest International Monetary Fund forecasts, global economic activity is expected to grow by 3.9% in 2015. The USA, Euro Area are projected to expand 3.1%, and 1.35%, respectively this year. But growth will slow down in the world second largest economy China in 2015. China successfully reached 7.4% GDP growth last year but is forecasting only 7.1% this year. But China central bank reduced interest rate to loosen monetary policy and expand infrastructure to stimulate the manufacturing sector that will improve the petrochemicals demand. China also needs to face oversupply situation in many petrochemicals after invested and build-up facilities in past few years. Fortunately, there is less new capacity will come on stream from other areas include of Middle East this year, with the region's advantage of low feedstock cost. For Asian petrochemical producers, they can enjoy low price feedstock of Naphtha and LPG this year because of oil price decreasing, but the competition will come from integrated or not. The independent producers will not get enough feedstock to run their facility during turnaround season. Other aspects, we worry about US shale gas development that will affect Asia market year by year. The US petrochemical producers will produce low cost derivatives and export them to every corner in the World.

Conclusion

The sluggish economic situation in recent years has heavily impacted both domestic and overseas petrochemical producers. However, IMF has forecast a better global economy this year. Meanwhile, the Taiwan government and some research institutes all pointed out that the GDP growth of Taiwan in 2015 would be raised to a higher point (3.8% VS 3.5 in 2014). Since the market demand of petrochemicals is closely geared up with the economic situation, it is anticipated that the

general performance of the petrochemical industry of Taiwan will benefit to some extent in 2015 and upcoming 2 to 3 years.

The year of 2015 should be a better year for the petrochemical industry worldwide as a whole, as oil price decrease, all petrochemical producers will make money due to low cost feedstock. Demand will grow in line with a recovery in global GDP, although the recovery varies by geographic regions. But there is no powerful engine to support a strong upturn in petrochemical demand, the pace of improvement might be moderate this year, largely driven by domestic demand in many emerging and developing countries. China, with its huge and growing demand for petrochemicals, will remain the single most influential factor in determining the outlook of Asian petrochemical. With more and more new capacities coming on stream, as mentioned above, China is going to change its position from a net importer to a net exporter in different derivatives (PTA、SBR、CPL...etc.)

The re-rise of the USA (shale gas), as the world's new production base for petrochemicals will surely changing this industry landscape. The competition for Asian petrochemical producers in coming years will be fierce under a surplus scenario. Flexible feedstock slates, upgraded production facilities and integrated local utilities/logistics to minimize production cost, will be major factors to survive for Asian petrochemical producers.

TAIWAN, REPUBLIC OF CHINA

General Matters& Raw Materials Committee

1. Olefins (Ethylene , Propylene , Butadiene)

ITEM : Ethylene Unit : MT

	Year	2011	2012	2013	2014	2015(est)
Supply	Production	3,522,138	3,478,448	2,925,325	4,182,340	4,200,000
	Import	373,205	348,415	254,440	130,877	220,000
	Total	3,895,343	3,826,863	4,179,765	4,313,217	4,420,000
Demand	Domestic	3,795,238	3,703,734	3,986,122	4,114,006	4,220,000
	Export	100,105	123,129	193,643	199,211	200,000
	Total	3,895,343	3,826,863	4,179,765	4,313,217	4,420,000
	Year End Capacity	4,015,000	3,820,000	4,420,000	4,005,000	4,005,000

2014 Review

July 31 , 2014 will be remembered as the worst day ever in Taiwan Petro- chemical Industry . 32 people lost their lives and 321 people injured due to human errors which caused a major propylene explosion in Chien -Cheng district of Kaohsiung City. Several pipelines, including Ethylene & Propylene, were terminated by local Government immediately. Finger-pointing & blame games are still underway between Central & Local Government but from local people's point of view how to take

action to ensure tragedies like this never happen again is most important of all . Reclaiming land from the sea adjacent to Kaohsiung Harbor and build a new grass root petrochemical complex seems to be a better solution.

Total production of ethylene last year in Taiwan was 4,182,140 MT, a growth of 6.55 % than previous year. The increase was attributed to CPC

Taiwan New No.3 naphtha cracker commercial running since Q4 2013.

However, the increase was lower than expected due to CPC Taiwan No.5 cracker shutdown from middle July of 2014.

Imports were down quite a lot due to increased self-sufficiency and nose-dive of crude oil in H2 2014.

While export was up 2.88% , reached an all time high of 199,211 MT .

2015Prospect

Though fair to middling by 1H Feb., market got much better after Chinese Lunar New Year. Players do believe to see strong rebounding from March due to heavy maintenance of crackers in NEA and expect to come to a long way from H2 of this year . Taiwan Government latest forecasts GDP growth of 3.78% this year will certainly contribute recovery of petrochemical business .

ITEM : Propylene Unit : MT

	year	2011	2012	2013	2014	2015(est.)
Supply	production	2,600,717	2,696,817,	3,047,400	3,237,323	3,300,000
	import	419,244,	388,646	245,872	144,305	200,000
	Total	3,019,961	3,085,463	3,293,272	3,381,628	3,500,000
Demand	Domestic	2,582,719	2,584,228	2,771,001	2,552,030	2,700,000
	export	437,242,	501,235	522,271	829,598	800,000
	Total	3,019,961	3,085,463	3,293,272	3,381,628	3,500,000
	Year end capacity	3,093,000	3,468,000	3,818,000	3,568,000	3,568,000

2014 Review

Total production of propylene amounted to 3,237,323 MT last year, increased 7.41% as compared to 2013. This came from both CPCcracker and RFCC. Taiwan domestic market demand of propylene was down 7.9 % in 2014, blamed to said explosion which also caused propylene export surging as high as 58.83% than 2013 .

2015 Prospect

Total demand of propylene will significantly depend on the world economic recovery , since 60% of Taiwan PP production (the largest propylene outlet) goes to foreign market . As the global economy is forecasted more and more optimistic by IMF within 2015-2016 . Demand increasing of propylene derivatives,

particular in developed countries, will apparently reflect on propylene demand in the near future. However, nearly two million MT of PDH new capacities came on stream in H2 of 2014. This certainly has negative effect for Taiwan PP producers.

ITEM : ButadieneUnit : MT

	year	2011	2012	2013	2014	2015(est.)
Supply	production	500,604	481,880	545,953	585,097	600,000
	import	199,945	165,642	128,426	127,705	120,000
	Total	700,549	647,522	674,379	712,802	720,000
Demand	Domestic	577,809	561,139	582,154	605,015	610,000
	export	122,740	86,383	92,225	107,787	110,000
	Total	700,549	647,522	674,379	712,802	720,000
	Year end capacity	620,000	580,000	670,000	600,000	600,000

2014 Review

In recent years, butadiene price has been changed drastically, leading to a very poor balance of supply/demand. In 2014, ample supply of domestic butadiene and spiral down of crude oil price made import butadiene down 0.6%.

The stagnant of butadiene consumption last year also clearly reflected from the negative growth rate of major butadiene derivatives , such as

SBR and BR. Major Taiwanese butadiene derivatives producers have relocated their plants to China . This will be an impact to Taiwan butadiene producers .

2. Aromatics (Benzene , Toluene , Xyl enes)

ITEM : Benzene Unit : MT

	year	2011	2012	2013	2014	2015(est.)
Supply	production	1,553,843	1,683,578	1,725,922	1,793,826	1,800,000
	import	670,750	603,524	708,956	760,183	700,000
	Total	2,224,593	2,287,102	2,434,878	2,554,009	2,500,000
Demand	Domestic	2,224,593	2,257,102	2,434,878	2,486,009	2,450,000
	export	0	30,000	0	68,000	50,000
	Total	2,224,593	2,287,102	2,434,878	2,554,009	2,500,000
	Year end capacity	1,772,000	1,615,000	1,823,000	1,685,000	1,685,000

2014 Review

Total benzene production last year amounted to 1,793,826 MT, which rose 3.93% over the previous year. Entire of this was for domestic

consumption except 68 KT for export. Basically, Taiwan's benzene market is always in deficit condition. In recent years, more than 700,000

MT per year is required to make up the supply-demand balance .Total

benzene demand was 2,554,009 MT in 2014. The vast majority of it were consumed in producing SM , Phenol , and alkyl benzene . Benzene price dropped dramatically in H2 of 2014 made its consumers kept wait and see stance. This certainly had negative effect to benzene downstream demand, especial in SM.

2015 Prospect

In view of the improvement of supply-demand situation and the recovery of downstream market . Taiwan benzene business should be more stable this year. Supply from CPC is expected to decline due to shutdown of No. 5 NC , which turns out less pygas available for the feedstock of benzene production .

ITEM : Toluene

Unit : MT

	year	2011	2012	2013	2014	2015(est.)
Supply	production	22,982	26,731	76,019	285,659	200,000
	import	168,974	242,956	372,106	241,307	250,000
	Total	191,956	269,687	448,125	526,966	450,000
Demand	Domestic	183,561	251,196	378,898	245,346	300,000
	export	8,395	18,491	69,227	281,620	150,000
	Total	191,956	269,687	448,125	526,966	450,000
	Year end capacity	93,000	93,000	93,000	384,000	384,000

2014 Review

Total production of toluene was 285,659 MT last year .It surged 275.77% over a year before . The apparent consumption was 245,346 MT. Export constituted 98% of production. Import accounted for more than 95% of local market consumption. Local two major aromatics players, CPC and FCFC, Played different strategies last year. FCFC did not take toluene as a major product; rather, FCFC transformed it into benzene and xylenes through TDP unit. On the other side , CPC got toluene from BTX units and sold to local market , with the remaining exported offshore .

2015 Prospect

Due to economical unattractive in CPC xylenes separation system , more toluene will export from CPC this year. Total local toluene consumption seems to be decreasing along with the continued out-move of industrial investments to foreign countries.

ITEM : Xylenes Unit : MT

	year	2011	2012	2013	2014	2015(est.)
Supply	production	2,496,345	2,594,550	2,477,974	2,152,770	2,600,000
	import	1,850,883	1,357,938	1,329,369	1,127,447	1,200,000
	Total	4,347,228	3,952,488	3,807,343	3,280,217	3,800,000
Demand	Domestic	3,538,246	3,113,525	2,063,643	1,790,050	1,900,000
	export	808,982	838,963	1,743,700	1,490,167	1,900,000
	Total	4,347,228	3,952,488	3,807,343	3,280,217	3,800,000
	Year end capacity	3,002,000	3,002,000	3,180,000	3,180,000	3,180,000

2014 Review

In 2013, total xylenes production registered 2,152,770 MT, comprising different isomers of xylenes. This marked a down rate of 13.12% over 2013. Production has been descending since 2011, following the cyclical peak of fiber business. Para-xylene accounted for the vast majority of xylenes output. However, surging new PTA capacities in China plus differential import tax to China from ASEAN countries made Taiwan PTA producers slashed PTA units' utilization last year.

2015 Prospect

Taiwan PTA industry has been in difficult; profitability has been eroded very serious and hardly to recover in the near future. Under this circum- stance and weak oil prices, xylene prices would stay at low level when gasoline season is over in coming few years.

TAIWAN, REPUBLIC OF CHINA

POLYOLEFINS COMMITTEE

LD/LLD/EVA

Unit: 1,000MT

LDPE/LLDPE/EVA	2012	2013	2014	Changes	2015(Est.)	Changes
Production	499	588	576	-2.0%	642	+11.4%
Imports	313	271	290	+7.0%	257	-11.4%
Exports	385	464	416	-10.3%	421	+1.2%
Demand	427	395	450	+13.9%	478	+6.2%
Capacity	794	794	794	-	794	-
Operating Rate	62.8%	74.1%	72.5%	-	80.9%	-

2014 Review

1. Three producers in Taiwan

Formosa Plastics Corp.	264kt LLDPE 240kt EVA/LDPE
USI Corp.	40kt LLDPE 140kt EVA/LDPE
Asia Polymer Corp.	110kt EVA/LDPE
Total capacity	794kt

- Some South Korean new capacities were brought on stream in 2014 H1, and led to a new round of competition, which again cooled down not long after VAM prices shot up to a record high level due to keen shortage of supply.
- Since July 2014, crude oil prices kept falling for a few months. Most buyers stepped aside and took wait-and-see strategies, particularly on EVA

purchases.

2015 Outlook

1. Two new production lines are scheduled to be on stream in Q4, each has capacity of 45,000MT/year in terms of EVA production.
2. Due to the likely shortage of water on this island, combined with the situation of tight ethylene availability being developed these days, as the results of the fact that many naphtha crackers in N.E. Asia are taken offline during March-June, some producers in southern Taiwan may lower their operation rates in Q2.

TAIWAN, REPUBLIC OF CHINA

POLYOLEFINS COMMITTEE

HDPE

Unit:1,000MT

HDPE	2012	2013	2014	Change	2015(Est.)	Change
Production	469.0	560.0	524.6	-6.4%	569.0	+8.4%
Imports	79.6	76.9	78.3	+1.7%	64.7	-17.4%
Exports	259.0	329.0	303.4	-7.8%	296.0	-2.4%
Demand	289.6	307.9	299.5	-2.7%	337.7	+12.8%
Capacity	630.0	630.0	630.0	-	630.0	-
Operating Rate	74.4%	88.9%	83.3%	-	90.3%	-

2014 Review

1. Two producers in Taiwan

Formosa Plastics Corp. 530kt

USI Corp. 100kt

Total capacity 630kt

2. Local demand decreased slightly in 2014 over 2013, because the crude oil and ethylene prices fell sharply in Q4, thus the downstream converters shed their inventory by reducing their purchases of new resins before the yearend. In 2015 Q1, the buying mood returns and there even was a rush in late Feb. responding to the rising ethylene prices.

2015 Outlook

1. No new projects or additional capacity for HDPE in sight.

2. Due to the likely shortage of water, combined with the situation of tight ethylene availability being developed these days, as the results of the fact that many naphtha crackers in N.E. Asia are taken offline during March-June, some producers in southern Taiwan may lower their operation rates in Q2.

TAIWAN, REPUBLIC OF CHINA

POLYOLEFINS COMMITTEE

Polypropylene

Unit: 1,000MT

PP	2013	2014	Change	2015(Est.)	Change
Production	1209	1042	-13.8%	1151	+10.5%
Import	154	175	+13.6%	160	-8.6%
Export	790	660	-16.5%	649	-1.7%
Demand	573	557	-2.7%	662	+18.9%
Capacity	1310	1310	-	1310	-
Operating Rate	92.3%	79.5%	-	87.9%	-

2014 Review

1. Three PP producers in Taiwan

Formosa Plastics Corp. 400kt

Formosa Chemicals & Fiber Corp. 510kt

LCY Chemical Corp. 400kt

Total capacity 1,310kt

2. The Asia propylene price had a dramatic change in 2014. In Aug'14; the price reached a record high. However owing to oil price decline and the on purpose propylene facility start-up in China, the price dropped about 54% by end of the year. Unstable feedstock price made propylene users face huge challenge on procurement strategy.

3. LCY Chemical Corp. PP facility outage, caused from serious propylene pipeline explosion in Kaohsiung, brought about regional PP supply tight. PP price trend went up during Q3~Q4'14 combined with propylene price drop resulted in other PP producers' margin in high level.

2015 Outlook

1. Taiwan domestic propylene supply will become tight because CPC's cracker No.5 may permanent shutdown this year.
2. In Q2'15, propylene will be rather tight as a result of cracker schedule shut down in NEA. However it will turn to loose in Q3-Q4'15 due to the 3 more PDH/MTO new additional capacity start-up in China and consecutive propylene expansion in SEA (Shell, Petron, Pertamina and IRPC).
3. LCY Chemical Corp. obtained the Government's permission to restart one 150kt/year polypropylene (PP) production line by lorry transported propylene since late January of 2015. Now is being in official audition. It may get fully permission during Q3'15 and will recover the capacity step by step. Its production forecast in 2015 is about 250,000 ton.

TAIWAN, REPUBLIC OF CHINA

Styrenics Committee

ITEM : STYRENE

	Year	2012	2013	2014	2015(E)
Supply	Production	1,790,376	2,044,325	1,974,323	2,033,552
	Import	383,669	393,855	384,808	396,352
	Total	2,174,045	2,438,180	2,359,131	2,429,904
Demand	Domestic	1,822,088	1,924,233	1,794,666	1,981,959
	Export	351,957	513,947	564,465	447,945
	Total	2,174,045	2,438,180	2,359,131	2,429,904
Year End Capacity		1,910,000	2,030,000	2,030,000	2,030,000

2014 Market Review

- 1) The export volume of SM was 564KT and most of which was shipped by FCFC to their PS/ABS plants in Ningbo, China. The total import volume near the same as 2013, the supply/demand balance was still net short in Taiwan.
- 2) The globally weak macroeconomic environment is suppressing styrene demand growth. Slower real estate prices and stagnant housing and constructions sectors are weighing on styrene demand, especially in China.

2015 Outlook

- 1) Demand growth is inevitable concentrated in China throughout the forecast years. However some growth is also expected in Taiwan, mainly for making ABS for export. Forecast annual growth rate in Northeast Asia is expected to be slower at around 3%.
- 2) A combination of feedstock, low oil price, technical, economic, logistical and commercial factors will cause SM supply to increase; the forecast is 3% growth in comparison with last year.
- 3) It is critical for the world's styrene industry partly because of China's demand growth remains strong and continues to import more quantities of styrene. In case China operates its styrene plants at full capacity, and supply the product to Chinese consumers for captive uses, then the world styrene industry as a whole might be suffered for losing huge exports to China market.

ITEM : Polystyrene

Year	2012	2013	2014	2015(E)
Production	838,330	828,031	775,078	803,190
Import	10,539	8,508	7,743	8,252
Export	745,904	760,927	723,940	738,099
Domestic Demand	102,635	75,612	58,881	73,343

Export Comparison

Year	2013	2014	Change of 2014
Hong Kong	103,505	63,618	-39,887
China	324,923	229,041	-95,882
Other	332,499	431,281	98,782
Total	760,927	723,940	-36,987

2014 Market Review

- 1) Total export volume decreased 4.9% or 37.0 KT, resulting from demand decline from China and HK market for which export volume decreased 31.7% in comparison with last year. HK and China markets shared 40.4% of total PS export volume of Taiwan. The Middle East demand increased 29.7% over last year.
- 2) In 2014, the crude oil prices continued to move lower; PS market in China declined also.
3. Indeed, 2014 has been a major disappointment, particularly for demand of EPS which showed a negative growth for the first time since 2010.

2015 Outlook

- 1) PS market in China forecasted to keep declining in 2015 because of the slowdown of its GDP growth and rise of self-sufficiency. PS

production in Taiwan is forecasted to be the same as 2015 in view of the cheaper raw materials and stable economic recovery.

- 2) PS manufactures in Taiwan keep making their effort to cautiously expand export markets in developing countries particularly in the Middle East area.

ITEM : ABS

Year	2012	2013	2014	2015(E)
Production	1,209,109	1,210,159	1,201,685	1,204,108
Import	14,561	10,231	13,167	13,101
Export	1,100,340	1,095,372	1,046,883	1,046,895
Domestic Demand	123,330	125,018	167,969	170,314

Export Comparison

Year	2013	2014	Change of 2014
Hong Kong	298,396	296,445	-1,951
China	569,389	523,932	-45,457
Other	227,587	226,506	-1,081
Total	1,095,372	1,046,883	-48,488

2014 Market Review

- 1) ABS export volume from Taiwan decreased 4.4% or 48.5KT in comparison with 2013 mostly resulted from demand decrease from HK and China.
- 2) In 2014, with the crude oil prices continued to move lower, the ABS market in China faced downward pressure as domestic demand stayed lackluster.
- 3) Total ABS capacity of China's local manufacturers increased approximately 120KT in 2014. In the same time, demand from Europe declined due to the reference point is becoming less obvious.

2015 Outlook

- 1) GDP of China is forecasted to be +7.1% this year. Supply of chemicals tends to be saturated, and the self-sufficiency rate is also on the rise.
- 2) Over the next years, operating rates are expected to improve to over 80% as global demand improves, and the excessive capacity would be absorbed.
- 3) Domestic ABS demand in Taiwan is forecasted to be flat.

TAIWAN, REPUBLIC OF CHINA

The PVC committee

1. Market review of **PVC** in 2014

- In 2014 PVC production was 1,515 KMT in Taiwan, representing a 83.5% of operating rate and 6.5% annual decrease due to high crude oil and ethylene prices that caused ethylene based PVC less competitive against China's carbide based PVC in the first three quarter of 2014.
- PVC demand in 2014 amounted to 524 KMT with a decrease of 8.1% from previous year, because of less competitive of PVC finished goods with Chinese products.
- In 2014, PVC export was 975 KMT, a decrease of 8.8%.Some part of export to India market was taken by low-priced carbide based PVC from China.
- Taiwan imported 27 KMT PVC in 2014.

2. Market review of **VCM** in 2014

- In 2014 VCM production was 1,822 KMT in Taiwan, a 4.1% of annual decrease which was caused by poor ethylene based PVC competitiveness in 2014.
- 2014 VCM demand was 1,529 KMT, declined 6.4%.
- 2014 VCM export recorded 346 KMT and the major volume was shipped to FPC's Ningbo plant for captive consumption.
- Taiwan imported 53 KMT of VCM in 2014.

3. 2014 Review and 2015 Prospect of PVC

CGPC	Toufen	180	180	180	180	180	180	220
CGPPC	Linyuan	--	--	170	170	170	170	170
	Total	180	180	350	350	350	350	390
OPC	Taoyuan	150	150	150	150	150	150	150
Grand Total		1,631	1,631	1,631	1,801	1,801	1,801	1,805

Table 2. PVC Supply/Demand in Taiwan

Unit : KMT/YR

Year	Production (1)		Import (2)	Export (3)	Demand (1)+(2)-(3)	
	MT	Growth	MT	MT	MT	Growth
2008	1,386,461	-8.3%	22,564	811,332	607,584	-16.3%
2009	1,415,912	2.1%	22,965	910,240	551,810	-9.2%
2010	1,432,683	1.2%	29,868	829,519	613,300	11.1%
2011	1,410,643	-1.5%	24,346	854,056	581,704	-5.2%

2012	1,510,379	7.1%	20,199	986,804	553,029	-4.9%
2013	1,621,122	7.3%	22,523	1,068,876	569,782	3.0%
2014	1,514,892	-6.6%	26,643	975,207	523,787	-8.1%

Table 3. Nameplate Capacity of VCM in Taiwan

Unit : KMT/YR

Producer	Location	2009	2010	2011	2012	2013	2014	2015
FPC	Jenwu	540	540	540	540	540	540	540
	Linyuan	240	240	240	240	240	240	240
	Mailiao	800	800	800	800	800	800	800
	Total	1,580	1,580	1,580	1,580	1,580	1,580	1,580
TVCMC	Linyuan	300	300	385	385	400	420	420
Grand Total		1,820	1,880	1,880	1,965	1,965	2,000	2,000

Table 4. VCM Supply/Demand in Taiwan

Unit : KMT/YR

Year	Production		Net Export	Demand	
	MT	Growth	MT	MT	Growth
2008	1,632,595	-9.5%	250,146	1,410,720	-8.3%
2009	1,772,585	8.6%	340,615	1,431,970	1.5%
2010	1,758,189	-0.8%	343,790	1,445,054	0.9%
2011	1,687,809	-4.0%	274,714	1,424,750	-1.4%
2012	1,817,398	7.7%	305,059	1,512,339	7.0%
2013	1,900,196	4.6%	266,142	1,634,054	8.0%

2014	1,822,000	-4.1%	292,722	1,529,278	-6.4%
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Taiwan, Republic of China

Synthetic Rubbers Committee

1. Synthetic Rubber(SBR+BR)

Unit: MT

		Year	2010	2011	2012	2013	2014
SR	Supply	Capacity	160,000	160,000	160,000	160,000	160,000
		Production	159,680	160,304	144,947	145,781	161,485
		Import	71,224	61,334	73,756	77,900	65,653
	Demand	Domestic	93,384	85,554	86,704	82,592	73,984
		Direct export	137,520	136,084	131,999	141,089	153,154

2014 Review

In 2014, benefited from the improvement in Europe and the USA market, Taiwanese export and consumption was better than expectation and annual GDP increased by 3.5%⁽¹⁾ which is the best performance in 3 years.

On account of the increasing consumer confidence and the propensity to change automobiles every 10 years, 2014 domestic auto sales reached 424 thousand units, increased 12% compared to a year earlier.⁽²⁾ Synthetic rubber production rose by 10.8% compared with the previous year. However, the domestic shipment declined by 10.4%, and export volume increased by 8.6% due to the increase demand from oversea

market.

2015 Prospect

The global economy is expected to continuously improve in 2015. Although the performance of China will be slightly decline, the economic growth rate of the US, EU, Japan may increase over 2014 and drive the global trade growth increase more than 1%. Taiwan is expected driven by favorable factors, the economic performance in 2015 will be better than the previous year⁽³⁾.

As for the automobile industry in Taiwan, owing to oil price remains low, 2015 output value of auto manufacturers is predicted to grow by 5.1-6.4%⁽⁴⁾. Meanwhile, new vehicle sales in first two months had year-on-year increase of 12.3%. The domestic production of tires and synthetic rubber may have opportunity to outperform than last year.

(1) Directorate-General of Budget, Accounting and Statistics, Executive Yuan, R.O.C.

(2) Automotive Research & Testing Center (ARTC)

(3) Federation of Industries, R.O.C.

(4) Industry Technology Research Institute

TAIWAN, REPUBLIC OF CHINA

Synthetic Fiber Raw Material Committee Supply and Demand of Major Synthetic Fiber Raw Materials

		2010	2011	2012	2013	2014	2015(est.)	2013/2014 increase (+%) or Decrease (-%)	2014/2015 increase (+%) or Decrease (-%)
Acrylonitrile	Production	458,361	416,262	443,105	458,000	464,500	460,000	1.4%	-1.0%
	Import	113,981	107,834	107,433	97,820	110,180	100,000	12.6%	-9.2%
	Export	102,820	113,438	155,337	175,752	184,850	170,000	5.2%	-8.0%
	Domestic Demand	469,522	410,658	395,201	380,068	389,830	390,000	2.6%	0.0%
Caprolactam	Production	290,359	271,215	291,873	278,000	228,000	300,000	-18.0%	31.6%
	Import	414,613	410,634	390,116	444,515	442,950	350,000	-0.4%	-21.0%
	Export	0	369	7,452	8,704	1	0	-100.0%	-100.0%
	Domestic Demand	704,972	681,480	674,537	713,811	670,949	650,000	-6.0%	-3.1%
Ethylene Glycol	Production	2,138,585	1,993,615	1,944,305	2,112,419	2,298,600	2,400,000	8.8%	4.4%
	Import	271,772	278,893	273,159	311,130	204,556	150,000	-34.3%	-26.7%
	Export	1,281,056	1,234,108	1,237,193	1,323,431	1,482,794	1,500,000	12.0%	1.2%
	Domestic Demand	1,129,301	1,038,400	980,271	1,100,118	1,020,362	1,050,000	-7.2%	2.9%
PTA	Production	5,126,706	5,302,900	4,388,262	2,929,805	2,596,260	2,500,000	-11.4%	-3.7%
	Import	12,144	1,008	2,543	21	-	-	-100.0%	#DIV/0!
	Export	2,679,279	2,960,983	1,938,284	497,718	208,724	150,000	-58.1%	-28.1%

	Domestic Demand	2,459,571	2,342,925	2,452,521	2,432,108	2,387,536	2,350,000	-1.8%	-1.6%
Total	Production	8,014,011	7,983,992	7,067,545	5,778,224	5,587,360	5,660,000	-3.3%	1.3%
	Import	812,510	798,369	773,251	853,486	757,686	600,000	-11.2%	-20.8%
	Export	4,063,155	4,308,898	3,338,266	2,005,605	1,876,369	1,820,000	-6.4%	-3.0%
	Domestic Demand	4,763,366	4,473,463	4,502,530	4,626,105	4,468,677	4,440,000	-3.4%	-0.6%

EG Supply & Demand

		2009	2010	2011	2012	2013	2014	2015(est)
Supply	Production	2,038,649	2,138,585	1,993,615	1,944,305	2,112,419	2,298,600	2,400,000
	Import	239,789	271,772	278,893	273,159	311,130	204,556	150,000
	Total	2,278,438	2,410,357	2,272,508	2,217,464	2,423,549	2,503,156	2,550,000
Demand	Domestic	1,005,581	1,129,301	1,038,400	980,271	1,100,118	1,020,362	1,050,000
	Direct Export	1,272,857	1,281,056	1,234,108	1,237,193	1,323,431	1,482,794	1,500,000
	Total	2,278,438	2,410,357	2,272,508	2,217,464	2,423,549	2,503,156	2,550,000
Capacity(as of the end of each year)		2,380,000	2,380,000	2,380,000	2,380,000	2,380,000	2,580,000	2,630,000

Review 2014

In 2014, domestic production increased 8.8% to 2.3MMT; demand went down 7% to 1MMT due to strong competition of polyesters market. Extremely high raw material ethylene cost went up 8% to \$1410/MT ; poor downstream demand pulled MEG price down 12% to \$900-950/MT, which actually eroded margins in the period.

In the Q4 of 2014, crude oil price remained low, down 50% to below \$55/bbl of WTI against the price level in June. As lower crude oil price led to withdrawal of raw material speculators, MEG-C2 spread recovered back to \$200/MT.

Prospect 2015

With crude oil price hit the psychological bottom, polyester fiber demand growth will be stimulated in the traditional growing season. Market expects supply could be tight as SABIC plans to shut its 3 units for maintenance, and NanYa alternatively shut its plants for safety inspection in Q3. .

Domestic polyester fiber makers is expected to consume around 1-1.1MMT as that of 2014.

PTA Supply & Demand

		2010	2011	2012	2013	2014	2015(est)
Supply	Production	5,126,706	5,302,900	4,388,262	2,929,805	2,596,260	2,500,000
	Import	12,144	1,008	2,543	21	0	0
	Total	5,138,850	5,303,908	4,390,805	2,929,826	2,596,260	2,500,000
Demand	Domestic	2,459,571	2,342,925	2,452,521	2,432,108	2,387,536	2,350,000
	Direct Export	2,679,279	2,960,983	1,938,284	497,718	208,724	150,000
	Total	5,138,850	5,303,908	4,390,805	2,929,826	2,596,260	2,500,000
Capacity(as of the end of each year)		5,470,000	5,470,000	5,470,000	5,470,000	5,470,000	5,470,001

Review 2014

In 2014, PTA still in oversupply and could not reflect raw material cost. The squeezed spread showed below \$100/MT.

Due to severe competition from China producers, restructured local makers exported 2MMT PTA, less 60% than that of 2013.

Domestic production reduced 11% YoY as target market oversupply.

Prospect 2015

PX follow crude oil price down to \$800-900/MT but spread value still below \$100/MT

Severe competitive conditions will continue to drive domestic makers running at a lower operation rate.

Domestic polyester fiber makers is hopefully to consume 2.3-2.4MMT in 2015.

AN Supply & Demand

		2010	2011	2012	2013	2014	2015(est)
Supply	Production	458,361	416,262	443,105	458,000	464,500	460,000
	Import	113,981	107,834	107,433	97,820	110,180	100,000
	Total	572,342	524,096	550,538	555,820	574,680	560,000
Demand	Domestic	469,522	410,658	395,201	380,068	389,830	390,000
	Direct Export	102,820	113,438	155,337	175,752	184,850	170,000
	Total	572,342	524,096	550,538	555,820	574,680	560,000
Capacity(as of the end of each year)		495,000	495,000	520,000	520,000	520,000	520,000

Review 2014

In 2014, the demand side from ABS, AF, NBR, all seemed to have a slight "improvement," compared with 2013. ABS showed a slight growth; AF was relatively stable as AN price kept firm; NBR kept stable as usual. The AN price trend seemed to "copy" the one in 2013; however, with a higher AN price in 2014 for no new capacity addition. As usual, 2 peaks in Q1 and Q3, and Q2 is the coldest season, Q4 is slightly different since crude oil price dropped sharply. At an overall review, 2014 performance is slightly better than that of 2013.

The use of AN for ABS production increased slightly. Chi Mei, the huge player, estimated 2-3% of global growth.

Prospect 2015

The economic situations in China, USA, and Europe need to be closely observed. Chi-Mei estimates ABS global growth rate with a conservative viewpoint. GPPC and TAITA, another major ABS producer in Taiwan, both foresee weaker demand. As for the AF business, Tonghua is facing tough challenges from Chinese and Thailand AF producers. Two or three new plants (capacity amounted to 390~650kMTA) will on stream, so the Taiwanese export will definitely be reduced. This will also exert negative impact to Asian market. Furthermore, the Chinese government is implementing new AN policies (like prohibition of re-exporting, the domestic regulations on AN procurement and transportation). The AN producers in Japan, Korea, Taiwan, Thailand will face a SERIOUS challenge, and be forced to follow the RMB pricing system or to leave the market. Overall, it is believed that 2015 will be much tougher than 2014. ABS, AF, NBR producers in Taiwan will face

challenges from China, with keen competition, over-supply and low AN price. As a result, negative forecast of AN demand in Taiwan this year should be noted.

CPL Supply & Demand

		2010	2011	2012	2013	2014	2015(est)
Supply	Production	290,359	271,215	291,873	278,000	228,000	300,000
	Import	414,613	410,634	390,116	444,515	442,950	350,000
	Total	704,972	681,849	681,989	722,515	670,950	650,000
Demand	Domestic	704,972	681,480	674,537	713,811	670,949	650,000
	Direct Export	0	369	7,452	8,704	1	0
	Total	704,972	681,849	681,989	722,515	670,950	650,000
Capacity(as of the end of each year)		280,000	300,000	300,000	400,000	400,000	400,000

Review 2014

The business of Taiwan Nylon chain and the downstream sectors is highly dependent on export, with China as a major demand market. As a result of three successive years of caprolactam capacity boost, the output of CPL raised nearly 3 times. China is no longer a destination for import cargo. Foreign players need to find market elsewhere.

Compare with year 2013, Taiwan producer cut back about 18% of CPL production and about 3.6% import volume. The impact of overcapacity was not merely regional; it was also a worldwide shock. In general, the CPL market had suffered a hard landing and hit the bottom already.

Prospect 2015

As there will be more CPL production capacity planned to be on commissioning in China this year, we can't go easy with the market so far. And yet, fortunately, the capacity difference between efficient CPL and Polyamide 6 facility will diminish a little bit compare with year 2014. The polymer production requirement will stimulate the CPL demand. Also, it will provide the Chinese CPL importer a bit more room and squeeze the polymer producer a bit further. Meanwhile, CPL producers in the rest of the world will have to fight another way out to overcome the over capacity, and to establish new supply-demand balance.

TAIWAN , PEPUBLIC OF CHINA
Chemicals Committee

ITEM: PHENOL

Unit: MT

Year		2011	2012	2013	2014	2015 (Estimated)
Item						
Supply	Production	1,045,724	1,054,595	1,098,679	1,011,019	1,118,500
	Import	24,326	10,084	26,138	65,676	25,000
	Total	1,070,050	1,064,679	1,124,817	1,076,695	1,143,500
Demand	Domestic	838,180	908,501	989,409	978,954	980,800
	Direct Export	231,870	156,178	135,408	98,101	137,700
	Total	1,070,050	1,064,679	1,124,817	1,076,695	1,143,500
Capacity (as end of the year)		1,080,000	1,080,000	1,080,000	1,080,000	1,080,000

● **Review of 2014**

Overall, Taiwan's production has maintained constant with no major fluctuations compared with that of previous year. Imported volume increased sharply due to un-smoothly restart up of one supplier after its annual maintenance.

● **Prospect of 2015**

Supply and demand balance will not have a big change in Taiwan in year 2015. CCP will increase its captive use upon DTBE plant starts up second half of 2015. High captive use volume will help phenol producers in Taiwan to maintain reasonable operation rate while too much new capacity addition is seen in China.

ITEM: ACETIC ACID

Unit: MT

Year		2011	2012	2013	2014	2015 (Estimated)
Supply	Production	573,000	720,000	883,000	950,000	890,000
	Import	166,000	28,000	6,400	1,100	2,000
	Total	739,000	748,000	889,400	951,100	892,000
Demand	Domestic	717,500	679,300	582,400	603,600	591,600
	Direct Export	21,500	68,700	301,000	347,500	300,400
	Total	739,000	748,000	889,400	951,100	892,000
Capacity (as end of the year)						

	1,180,000	1,180,000	1,180,000	1,180,000	1,180,000
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- **Review for 2014**

The total domestic demand of acetic acid increased 3.6% compared with that of 2013, mainly due to boosted VAM production that consumed around 15% more of acetic acid. However, the market situation of PTA was still worsening in Taiwan, and the operational rate remained undesirable, at an estimated level of only 40~50%. Thus the acetic acid consumption was lowered to a large extent.

- **Prospect of 2015**

Because of the poor economic situation and the effect of the new capacity addition in China, Taiwan's PTA production continues to decline. There is no any sign of recovery. At the same time, GAA demand for solvent can only be flat over last year. Furthermore, DCC, the largest and only producer of VAM in Taiwan, is to conduct annual regular maintenance, so the consumption of acetic acid will decrease. The total domestic demand is expected to reduce to approximately 591,600MT in 2015. The price of GAA in Asia, including Taiwan, rebounded before Q2 2015, in response to the rising feedstock prices and the scheduled plant turnarounds of Asian producers.

ITEM: METHANOL

Unit: MT

Year	2010	2011	2012	2013	2014	2015 (Estimated)
Item						

Supply	Production	0	0	0	0	0	0
	Import	1,074,061	1,082,784	1,150,822	1,168,934	1,340,936	1,400,000
	Total	1,074,061	1,082,784	1,150,822	1,168,934	1,340,936	1,400,000
Demand	Domestic	1,074,061	1,082,784	1,150,822	1,168,934	1,340,936	1,400,000
	Direct Export	0	0	0	0	0	0
	Total	1,074,061	1,082,784	1,150,822	1,168,934	1,340,936	1,400,000
Capacity (as end of the year)		0	0	0	0	0	

- **Review of 2014**

Methanol pricing had a wide range spread in 2014, ranging from USD 540 to USD 250. Per ton. Overall, the supply-demand of its derivatives, such as formaldehyde, MMA, MTBE and POM, were in healthy and stable condition. However, the methanol price fell down, especially in the 4th quarter of 2014 owing to sharp drop of crude oil price and the delay of some MTO/MTP commissioning in China. Thus, it affected customer's confidence in the upcoming market operation and the pricing structure negotiation

- **Prospect of 2015**

Due to unforeseeable situation of MTO/MTP development in China, this will continue to impact the market in the rest of Asian countries, including Taiwan. Also, the trend of crude oil price is believed to be another influencing factor. The policy of China government on the development of some methanol derivatives, such as DME, MTBE and Methyl compounds, are important

concerns that will decide methanol price level. Few methanol producers from Southeast Asia are expected to schedule plant maintenance in Q2, 2015. The methanol market in Taiwan is most likely to remain stable.

ITEM : ALKYL BENZENE

Item \ Year		2013	2014	2015(EST)
Supply	Production	102000	90800	100000
	Import	0	0	0
	Total	102000	90800	100000
Demand	Domestic	22000	20500	21000
	Direct Export	76000	72000	77000
	Total	98000	92500	98000
Capacity(as of the end of each year)		125000	125000	125000

- Review of 2014

Synthetic detergent production in Taiwan was 182,990MT in 2013 and is 172,020MT in 2014. This decreasing of synthetic detergent production caused Taiwan domestic alkyl benzene consumption falling to 20500MT last year.

Alkyl benzene export quantity diminished because of the keen competition from substitute materials and other alkyl benzene suppliers.

- Prospect of 2015

The alkyl benzene market competition will be even fiercer because the forecast global demand of alkyl benzene will keep flat, and there will be a new capacity addition.