

Market Price and Trends

1. General description of product price (March)

Due to the small supply amount in market and the stable price rise of petrochemicals, the PE market price started a stable increase in March after a short period of readjustment at the beginning of the month. In that period the crude oil price in the international market returned once again to over US\$50 per barrel and was maintained at a relatively high level. The mentality of PE dealers for a price rise was therefore stimulated and the market price made a sustained increase.

2. Analysis of price trend in the domestic market

North China: The PE market price in North China made a drop first and an increase later in March. Some dealers sold their goods with a reduced profit. The crude oil price in the international market made a reduction. The PE market price maintained a trend of fluctuations at a high level. The mainstream price of domestic LLDPE was RMB9 300-9 335 per ton at the end of March and the price of imported LLDPE was slightly higher, being RMB9 450 per ton. The mainstream price of LDPE was RMB9 500-10 500 per ton. The price was around RMB11 000 per ton for HDPE drawing material, RMB10 300 per ton for HDPE hollow material, RMB9 500-9 600 per ton for HDPE injection molding material and RMB10 500-10 600 per ton for HDPE pipe material.

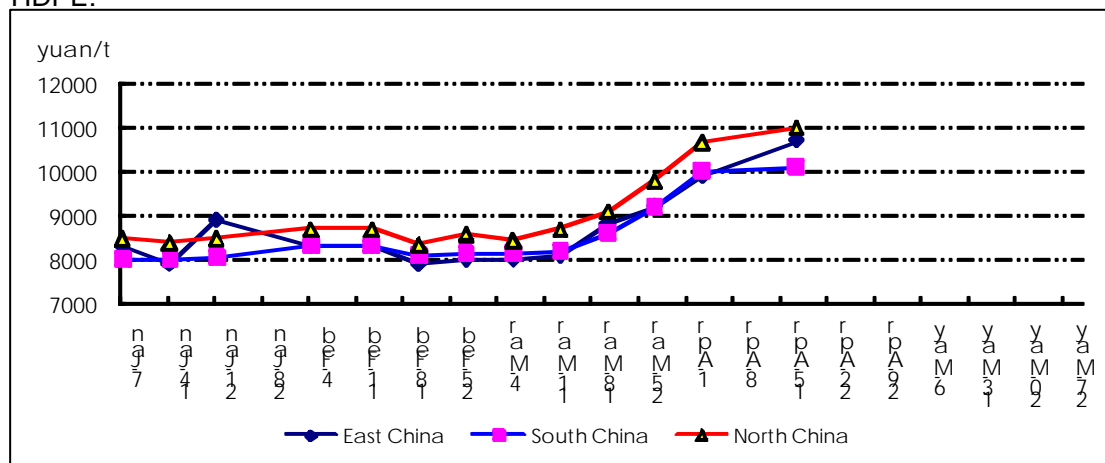
East China: As market transactions were not satisfactory at the beginning of March, the PE price in East China mostly made a reduction compared with the price at the end of February and the price-bearing capacity of downstream plants almost touched the bottom. With the sustained crude oil price rise in the international market and the small supply amount, the PE market started a firm rebound from the middle of the month. The price rise in the entire East China market was gradually halted several days before the end of the month. The main reason was that the crude oil price dropped once again to below US\$50 per barrel and downstream plants that could hardly bear the high price took a wait-and-see attitude. The mainstream price of LLDPE was RMB9 400-9 500 per ton at the end of March. There was relatively small price difference between domestic products and imported products. The mainstream price of LDPE increased to RMB9 400-9 600 per ton in this month. In the case of HDPE, the import amount was extremely small and there was almost no supply. The price of HDPE was at first returned to over RMB10 000 per ton. The mainstream price is RMB10 700-11 000 per ton today. HDPE injection molding material and HDPE hollow material also had supply shortage. The price of domestic products was already over RMB10 000 per ton. The price of imported products was lower. It was around RMB9 000 per ton for HDPE low-melting injection molding material, RMB9 500 per ton for HDPE high-melting injection molding material and RMB9 300 per ton for HDPE hollow material. HDPE film material also has supply shortage these days and the

mainstream price has already increased to RMB9 500 per ton. The main reason is that Jilin Chemical Co., Ltd. has shifted to produce HDPE pipe and 9455F is therefore in short supply.

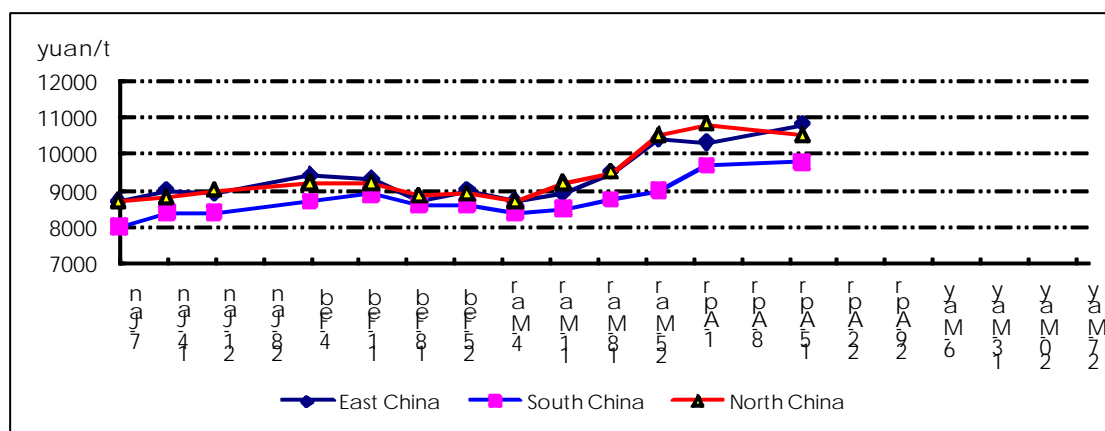
South China: The PE market price made a sustained drop in South China in March. The market started to recover in the second week. Sales at a fixed price conducted by Sinopec stabilized market mentality. Great quantities of imported products were sold at the time of price reduction. There was therefore supply shortage in the market. The market price went all way up in the third week and the fourth week. The market supply amount of LDPE was slightly more than other products and the mainstream price was RMB9 000-9 100 per ton. In the case of HDPE, the mainstream price was RMB10 600-10 700 per ton for HDPE drawing material, RMB9 300-9 500 per ton for HDPE film material and HDPE hollow material and RMB9 550-9 600 per ton for HDPE injection molding material.

Southwest China and Northwest China: data not available

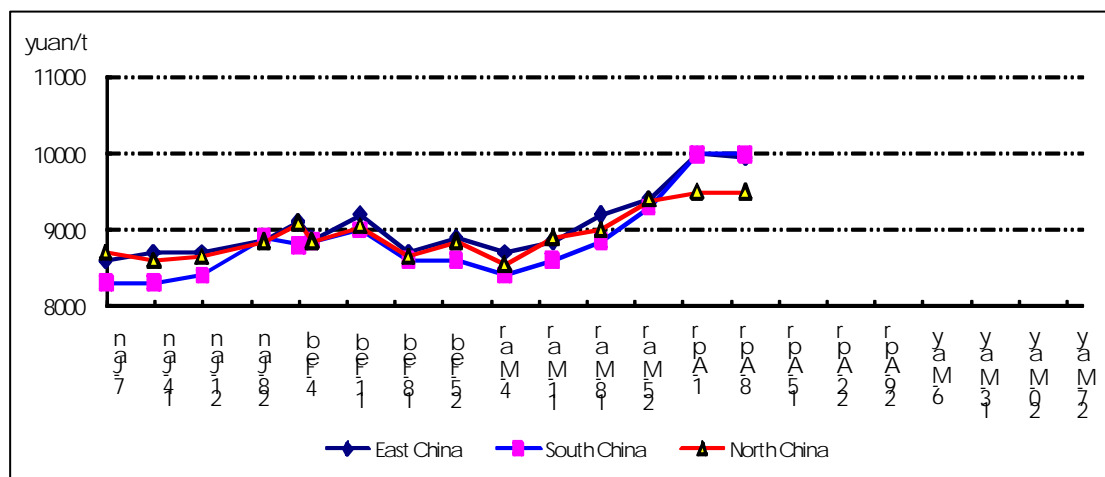
HDPE:



LDPE:

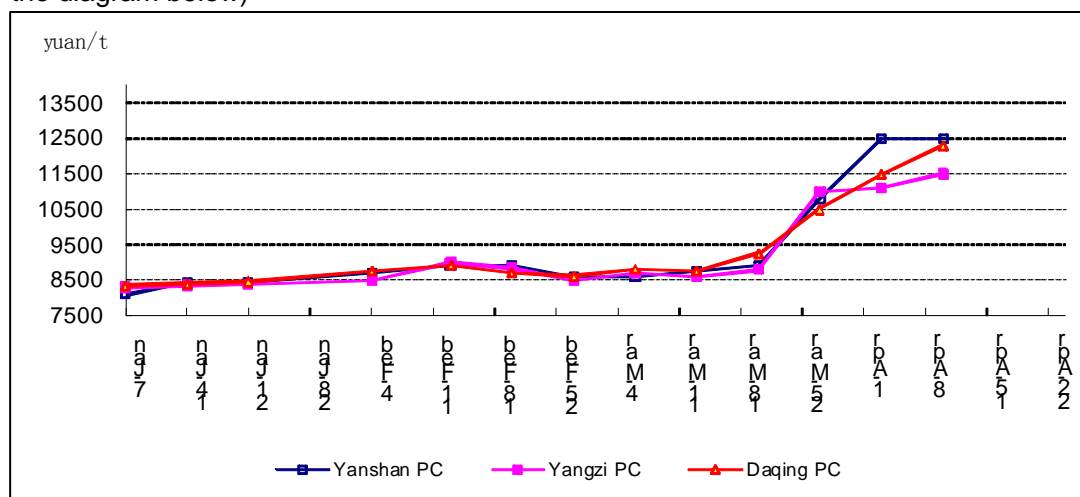


LLDPE:

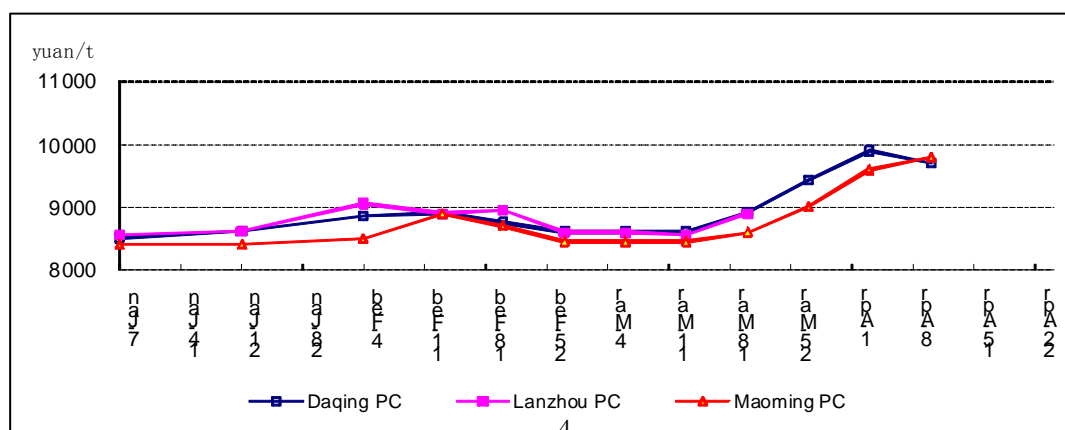


3. Price trend in domestic producers (March)

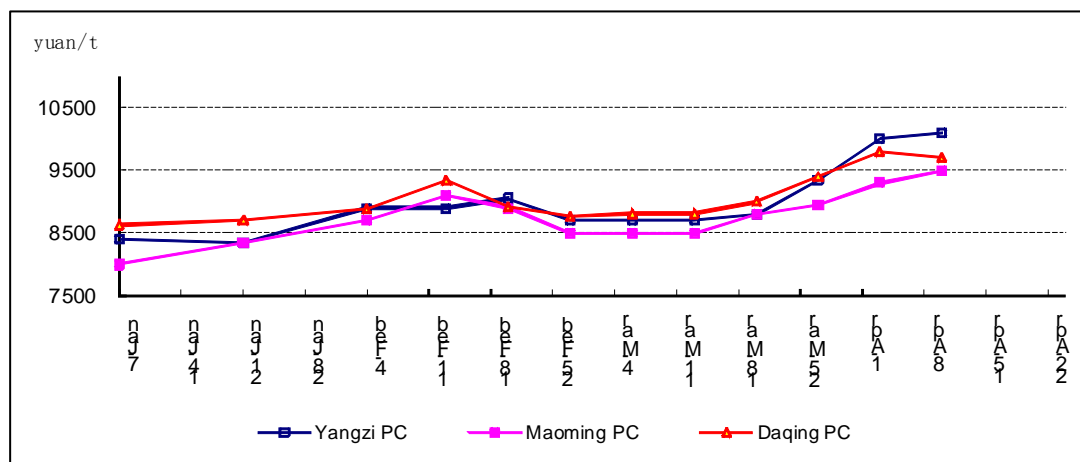
HDPE: HDPE ex-factory price data in Yanshan Petrochemical Co., Ltd., Yangzi Petrochemical Co., Ltd. and Daqing Petrochemical Co., Ltd. are taken as examples. (See the diagram below)



LDPE: LDPE ex-factory price data in Daqing Petrochemical Co., Ltd., Lanzhou Petrochemical Co., Ltd. and Maoming Petrochemical Co., Ltd. are taken as examples. (See the diagram below) There was no April price offer in Lanzhou Petrochemical Co., Ltd.



LLDPE: LLDPE ex-factory price data in Yangzi Petrochemical Co., Ltd., Maoming Petrochemical Co., Ltd. and Daqing Petrochemical Co., Ltd. are taken as examples. (See the diagram below)



4. Reasons for price trend

There were 3 main reasons for the price trend in March:

- (1) There was a supply shortage of PE in the domestic market. The inventory of petrochemicals was at a low level. No great quantities of imported products were delivered at ports in mid and late March.
- (2) The crude oil price in the international market increased sharply to over US\$50 per barrel. A price rebound was promoted. The mentality of market dealers was recovered and their enthusiasm in speculation was gradually stimulated.
- (3) There was support from the firm demand of agricultural film. March was the brisk season for the agricultural film production in North China. The sound situation of purchase orders effectively promoted price rise.

Historical Price of Domestic HDPE in China (RMB/t)													
Month		01	02	03	04	05	06	07	08	09	10	11	12
East China	Highest	1.20	1.20	1.39	1.40	1.43	1.70	1.60	1.56	1.54	1.36	0.96	0.83
	Lowest	1.15	1.13	1.38	1.38	1.40	1.43	1.52	1.39	1.36	0.96	0.76	0.80
	Average	1.16	1.17	1.38	1.39	1.42	1.60	1.56	1.48	1.46	1.18	0.80	0.82
South China	Highest	1.25	1.30	1.32	1.33	1.40	1.56	1.48	1.36	1.34	1.28	0.99	0.76
	Lowest	1.22	1.25	1.30	1.30	1.33	1.40	1.28	1.26	1.26	0.99	0.68	0.72
	Average	1.24	1.27	1.31	1.32	1.36	1.49	1.39	1.30	1.29	1.15	0.78	0.74
North China	Highest	1.35	1.36	1.38	1.40	1.43	1.62	1.58	1.48	1.40	1.30	0.90	0.88
	Lowest	1.32	1.34	1.36	1.36	1.40	1.43	1.44	1.30	1.28	0.90	0.70	0.70
	Average	1.34	1.35	1.37	1.38	1.42	1.56	1.51	1.40	1.34	1.12	0.80	0.82

Historical Price of Domestic LDPE in China (RMB/t)													
Month		01	02	03	04	05	06	07	08	09	10	11	12
East China	Highest	1.42	1.40	1.42	1.41	1.48	1.84	1.60	1.52	1.54	1.27	0.96	0.88
	Lowest	1.38	1.40	1.38	1.40	1.40	1.48	1.52	1.42	1.27	0.96	0.82	0.84
	Average	1.40	1.40	1.40	1.40	1.44	1.69	1.57	1.48	1.45	1.15	0.90	0.86
South China	Highest	1.31	1.34	1.31	1.34	1.56	1.80	1.60	1.40	1.32	1.19	0.90	0.84
	Lowest	1.28	1.28	1.28	1.28	1.34	1.56	1.40	1.28	1.18	0.76	0.68	0.78
	Average	1.29	1.31	1.29	1.32	1.46	1.70	1.50	1.34	1.26	0.98	0.82	0.80
North China	Highest	1.35	1.36	1.42	1.50	1.68	1.90	1.84	1.48	1.42	1.23	0.92	0.84
	Lowest	1.32	1.34	1.39	1.36	1.46	1.60	1.46	1.38	1.22	0.70	0.69	0.80
	Average	1.34	1.35	1.40	1.43	1.55	1.70	1.61	1.42	1.34	0.95	0.82	0.82

Historical Price of Domestic LLDPE in China (RMB/t)													
Month		01	02	03	04	05	06	07	08	09	10	11	12
East China	Highest	1.42	1.40	1.41	1.44	1.45	1.64	1.58	1.43	1.38	1.36	0.95	0.90
	Lowest	1.38	1.38	1.37	1.40	1.42	1.45	1.40	1.31	1.36	0.78	0.71	0.88
	Average	1.40	1.39	1.39	1.40	1.43	1.58	1.50	1.40	1.37	1.18	0.87	0.89
South China	Highest	1.41	1.34	1.41	1.43	1.47	1.65	1.58	1.40	1.34	1.22	0.90	0.86
	Lowest	1.39	1.28	1.39	1.39	1.41	1.47	1.40	1.27	1.22	0.75	0.72	0.80
	Average	1.40	1.31	1.40	1.41	1.44	1.59	1.49	1.36	1.29	0.99	0.80	0.83
North China	Highest	1.35	1.37	1.43	1.44	1.44	1.68	1.56	1.40	1.37	1.25	0.94	0.92
	Lowest	1.32	1.34	1.39	1.40	1.33	1.38	1.40	1.26	1.23	0.75	0.69	0.84
	Average	1.33	1.35	1.41	1.42	1.39	1.55	1.49	1.38	1.32	1.12	0.80	0.88

Domestic Production Status

1. PE output in China (February)

The PE output in China was 607 600 tons in February 2006, a growth of -1.98% compared with the output of 619 900 tons in January 2009.

PE output in China				
	PE output (t)	Growth over the same period of last year (±%)	Total (t)	Growth over the same period of last year (±%)
Feb 2006	44.58	14.31	93.25	9.71
Feb 2007	54.18	21.53	112.88	21.05
Jan 2008	60.35	2.81	60.35	2.81
Feb 2008	58.77	8.47	119.12	5.53
Mar 2008	62.68	5.86	181.8	5.64

Apr 2008	59.66	8.16	241.46	6.25
May 2008	58.45	-2.97	299.91	4.32
Jun 2008	52.41	-11.17	352.32	1.68
Jul 2008	57.05	6.98	409.37	2.39
Aug 2008	55.72	4.34	465.09	2.62
Sep 2008	51.29	-13.58	516.38	0.74
Oct 2008	61.98	0.81	578.36	0.75
Nov 2008	53.95	-9.33	632.31	-0.2
Dec2008	56.2	-3.4	688.51	-0.47
Jan 2009	61.99	2.72	61.99	2.72
Feb 2009	60.76	3.39	122.75	3.05

2. Major producers in China (March)

There are many PE producers in China and the total capacity was around 7.07 million t/a in 2008. Not many producers made shutdown or overhaul in March 2009. PE units maintained low-load operation.

The HDPE unit in Maoming Petrochemical Co., Ltd. shifted to produce 951-000; 951-050 was produced before. The second PE unit in Shanghai Petrochemical Co., Ltd. shifted to produce N220; Q281 was produced before. The second production line of the HDPE unit in Yanshan Petrochemical Co., Ltd. shifted to produce 3000JE; 2300XM was produced before.

3. Shutdown or overhaul in domestic producers (March)

The PE capacity for shutdown (or overhaul) in March was around 800 000 t/a (see the table below) and the output was reduced by around 17 800 tons.

Producer	Location	Capacity (t/a)	Date	Remark
Panjin PE	Liaoning	13	shutdown on Dec. 10, 2008	date for startup not yet defined
Lanzhou PC	Gansu	7	shutdown on March 10, 2009	startup already made
Shanghai Saike	Shanghai	60	shutdown on March 9, 2009	startup already made

4. Completion of new projects (March)

No new PE capacity started production in China in 2008. The capacity to start production in 2009 includes the 600 000 t/a FDPE and 300 000 t/a HDPE unit in Xinjiang Dushanzi

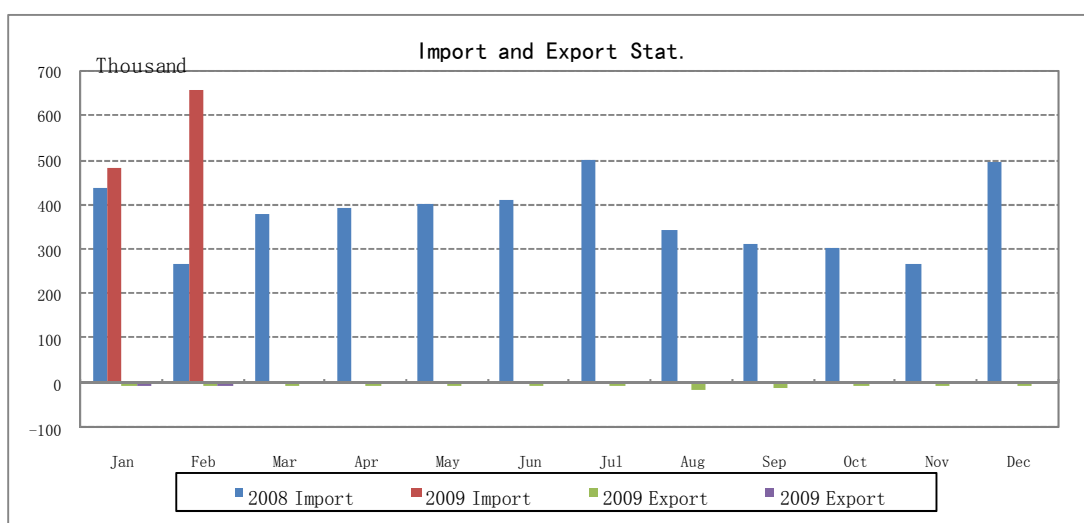
Ethylene Co., Ltd. and the 450 000 t/a FDPE and 350 000 t/a HDPE unit in Fujian Refining & Petrochemical Company Ltd.

Import and Export Analysis

1. Total import and export amount (February)

The import amount of PE was 1.1339 million tons from January to February 2009, an increase of 61.426% over the same period of last year.

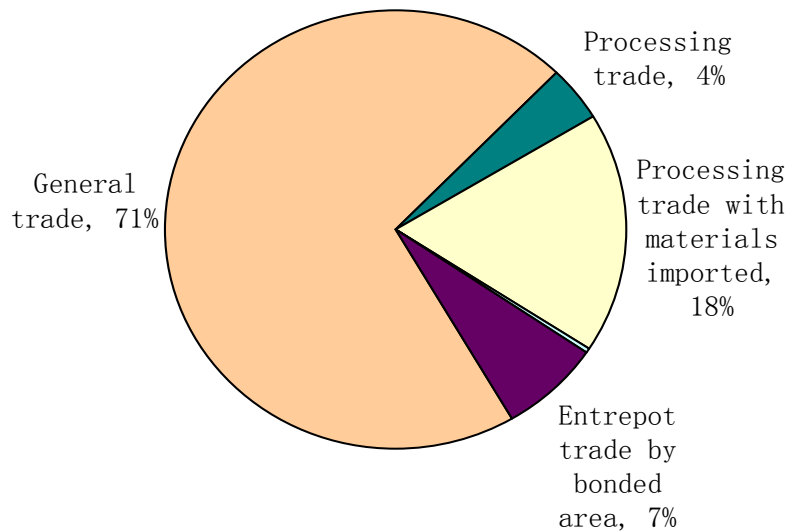
The export amount was around 9 100 tons, an increase of 56.90%.



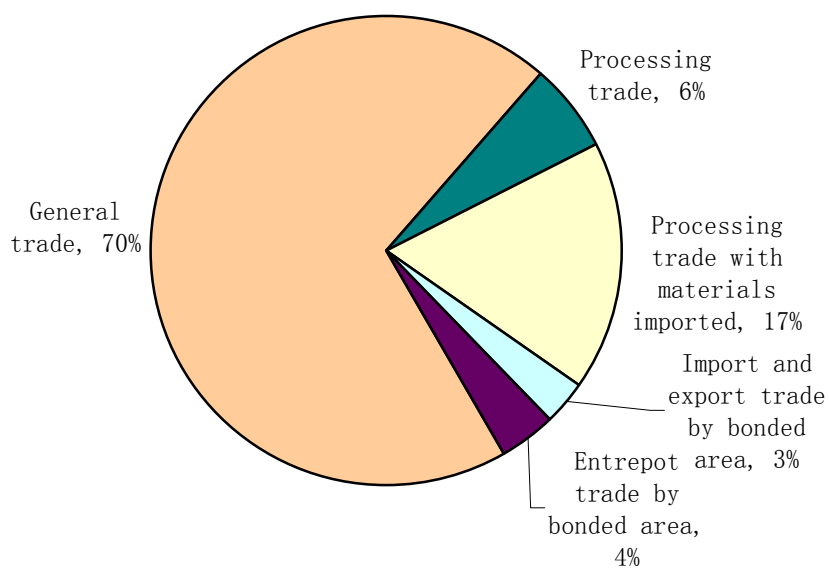
Total Import and Export Amount of PE from January to February 2009 (t, US\$ million, %)						
	Import amount	Import value	Export amount	Export value	Growth of the import amount	Growth of the export amount
Jan	479784	430.86	5511	7.97	10.02	79.10
Feb	654097	600.07	3635	5.50	143.34	33.33
Total	1133881	1030.93	9146	13.47	61.42	56.90

2. Import and export analysis (February)

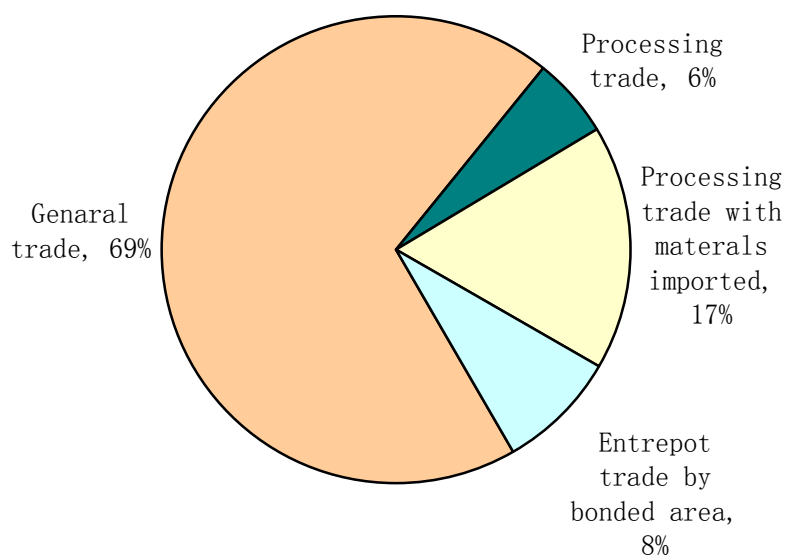
HDPE import status by trade methods



LDPE import status by trade methods



LLDPE import status by trade methods



3. Import and export price

The average import price of PE in China in February 2009 was:

- LDPE: US\$981 per ton, a drop of 1.9% from US\$1 000 per ton in January
- HDPE: US\$895 per ton, an increase of 2.05% over US\$877 per ton in January
- LLDPE: US\$915 per ton, an increase of 5.17% over US\$870 per ton in January

The average export price of PE in China in February 2009 was:

- LDPE: US\$1 753 per ton, a drop of 0.34% from US\$1 759 per ton in January
- HDPE: US\$1 358 per ton, a drop of 6.99% from US\$1 460 per ton in January
- LLDPE: US\$1 326 per ton, an increase of 39.59% over US\$950 per ton in January

Supply Status

1. Total supply amount (February)

The total supply amount of PE in China was 1.2617 million tons in February 2009, an increase of 14.73% over 1.0997 million tons in January 2009 and an increase of 47.34% over 856 300 tons in February 2008. The supply amount of domestic products was 607 600 tons and the supply amount of imported products was 654 100 tons.

Historical Supply Amount of PE in China				
	Domestic products (t)	Imported products (t)	Total supply amount (t)	Growth over the same period of the previous year ($\pm\%$)
2006, 02	44.58	36.87	81.45	7.17
2007, 02	54.18	34.64	88.82	9.05
2008, 01	60.35	43.61	103.96	0.08
2008, 02	58.77	26.86	85.63	0.13
2008, 03	62.68	37.68	100.36	0.11
2008, 04	59.66	39.22	98.88	0.2
2008, 05	58.45	40.22	98.67	0.04
2008, 06	52.41	41.13	93.54	0.02
2008, 07	57.05	49.73	106.78	0.35
2008, 08	55.72	34.27	89.99	1.24
2008, 09	51.29	31.07	82.36	0.76
2008, 10	61.98	30.06	92.04	0.28
2008, 11	53.95	26.6	80.55	0.19
2008, 12	56.20	49.25	105.45	0.49
2009, 01	61.99	47.98	109.97	5.86
2009, 02	60.76	65.41	126.17	47.53

2. Future supply trend (March)

It is expected that the output of PE will make a further increase in April and the price will have a reduction. The major factor is that no important PE producers have plans for shutdown or overhaul in the next month.

Demand Status

1. Total demand amount (February)

The apparent consumption of PE in China was 1.2581 million tons in February 2009 (See the table below), an increase of 14.98% over 1.0942 million tons in January 2009 and an increase of 47.39% over 853 600 tons in February 2008.

Historical Demand Amount of PE in China				
	Total supply amount (t)	Import amount (t)	Apparent consumption (t)	Growth over the same period of the previous year ($\pm\%$)
2006, 02	81.45	0.23	81.22	21.07
2007, 02	88.82	0.29	88.53	9.00

2008, 01	103.96	0.31	103.65	17.08
2008, 02	85.63	0.27	85.36	-3.58
2008, 03	100.36	0.36	100.00	-6.89
2008, 04	98.88	0.47	98.41	5.22
2008, 05	98.67	0.31	98.36	4.48
2008, 06	93.54	0.33	93.21	0.16
2008, 07	106.78	0.64	106.14	19.37
2008, 08	89.99	1.43	88.56	-1.38
2008, 09	82.36	0.91	81.45	-11.9
2008, 10	92.04	0.49	91.55	0.58
2008, 11	80.55	0.44	80.11	-16.38
2008, 12	105.45	0.73	104.72	9.67
2009, 01	109.97	0.55	109.42	5.57
2009, 02	126.17	0.36	125.81	47.39

2. Regional market of downstream products (March)

March 2009 was the brisk season for the agricultural film production. There was a firm demand of agricultural film and the response to the trend of the economic situation was therefore not sensitive. Our survey shows that the demand of agricultural film in 2009 has made a considerable growth compared with 2008. As the first quarter was the brisk season for the agricultural film production and the consumption of reclaimed materials made a drastic reduction, the production of agricultural film was a powerful driver for the demand of PE. The demand of LLDPE in agricultural film accounted for over 30% of the total LLDPE demand.

The first quarter was the brisk consumption season for PE resin. The demand of agricultural film and water pipes still supported the PE demand in Anhui, Shandong, Henan, Hebei, Shanxi, Shaanxi and Gansu.

Supply and Demand Balance Forecasting

The projection of the PE supply/demand balance is shown in the table below.

Projection of the Supply/Demand Balance in March 2009 (t)							
Time	Output	Import amount	Total supply amount	Export amount	Apparent consumption	Dependence on domestic products	Remark
01 (actual)	61.99	47.98	109.97	0.55	109.42	56.65%	
02 (estimated)	60.76	65.41	126.17	0.36	125.81	48.30%	
03 (expected)	60.00	35.00	95.00	0.50	94.50	63.49%	

Upstream Product Market Analysis

1. Price trend analysis

Due to the price rise of raw material naphtha and the support from the downstream PE market, the price of ethylene in Asia made a stable increase in the first half of March. The price trend in Northeast Asia and Southeast Asia was on the contrary in the second half of the month. The increase/reduction margin was however quite small and the price was stable.

Oversea Market Summary

1. Overseas market

North America: With the support of the firm demand from Asia, South America and North Africa, the price of PE injection molding/blow molding material in the United States made a stable increase in March. Market dealers think that the brisk demand in Asia will promote a further drastic price rise in the United States. Before the completion of units in the Middle East, the market price will still keep firm. At the end of March the FAS Houston price of HDPE film material was US\$0.44 per pound. The operating rate of LLDPE was relatively low and there were not many products for sale.

Europe: European producers have low inventory and low profit today and are not willing to make further price reduction. With the support from cost, the price of HDPE made an increase of 10-20 Euros per ton in March. European dealers have started to watch over profit-making chances from the skyrocketing price rise in Asia. The price rise of LLDPE is however quite limited.

Asia: Due to brisk demand and supply shortage, the price of HDPE in Asia increased by around US\$100 per ton in March. The mainstream price at the end of the month was RMB9 500-10 000 per ton for HDPE film material, RMB11 000-11 500 per ton for HDPE drawing material and RMB10 000-10 300 per ton for HDPE blow-molding material. The unexpected accident in Shanghai Secco promoted the price rise. Although the production was restored in Secco, there are yet no spot goods from the company in market. The export amount of PE in China is going down. Owing to economic stimulus policies implemented by the Chinese Government at a cost of RMB400 million (???), however, the demand of PE is on the increase. The price of HDPE drawing material has made the highest increase due to supply shortage. The market price of LDPE has increased to US\$1 040 per ton. The mainstream CFR transaction price of LLDPE is US\$1 050 per ton.

2. Overseas production trend

SCG of Thailand has 3 PE production units. Only one of them is making normal operation today. The other two are conducting renovation. One of them will shift to produce black pipe material and the normal production is expected to start in June. The situation of the other unit is not known. There are no products for sale in the market.

Products in Monthly/Yearly Reports Prepared

by

CNCIC Research Institute of Industrial Economy

ABS	Acetate	Acetic Acid	Acetic Anhydride
Acrylamide	Acrylic	Acrylic Acid & Esters	Acrylonitrile
Adipic Acid	Aniline	Asphalt	Benzene
Biodiesel	Bisphenol A	Butadiene Rubber	Butadiene
1,4-Butanediol	Butanol /Ethylhexanol	Calcium Carbide	Caprolactam
Caustic Soda	Chlorinated Polyethylene	Chlorine	Chloromethane
Chloroprene Rubber	Citric Acid	Coal	Coal Tar
Coke	Crude Oil	Diesel	Dimethyl Ether
DOP/DBP	EPDM	Epichlorohydrin	Epoxy Resins
Ethylene	Ethylene Glycol	Ethylene Oxide	EVA
Fatty Acids	Fluorite	Fluoroelastomers	Formaldehyde
Fuel Ethanol	Fuel Oil	Gasohol	Glycerin
Hydrochloric Acid	Hydrofluoric Acid	Hydrogen Peroxide	Industrial Naphthalene
Industrial Silicon	Isopropyl Alcohol	Kerosene	Lactic Acid
Lubricating Oil Asphalt	Maleic Anhydride	MDI	Melamine Resin
Methane Chloride	Methanol	Methyl Methacrylate	Natural Gas
Nylon	Organosilicon Monomer	Paraformaldehyde	Petroleum Coke
Phenol/ Acetone	Phenolic Resins	Phosphorus Chemicals	Phthalic Anhydride
PMMA	Polyacrylamides	polyamide	Polybutylene Terephthalate
Polycarbonates	Polyester	Polyesters	Polyether Polyols
Polyethylene	Polyactic Acid	Polyoxymethylene	Polypropylene
Polystyrene	Polytetrahydrofuran	Polyvinyl Alcohol	Polyvinylchloride
Propylene	Propylene Oxide	Raw Salt	SBS
Silane Couplant Agent	Silica	Silicone Oil	Silicone Rubber
Siloxane	Soda	Spandex	Starch
Styrene	Styrene-Butadiene Rubber	Sulfur	Sulfuric Acid
Super Absorbent Polymer	Syngas	TDI	Terephthalic Acid
Tetrafluoroethylene	Titanium Dioxide	Toluene	UHMWPE
Unsaturated Polyesters	Urea-formaldehyde Resin	Urethanes	Vinyl Acetate
Vinyl Chloride	Vinylon	Xylene	Yellow Phosphorus