



# CMAI Aromatics Market Report

Publication Date:		CONTRACT						SPOT				
Friday, March 25, 2011		Cents/Lb.		\$/Ton		€/Ton		Cents/Lb.		\$/Ton		
<b>UNITED STATES prices through Thu Mar 24</b>	Pyrolysis Gasoline (2)	308.64 - 330.08		965.1 - 1032.2		681 - 729		362.45 - 369.40	1100.6 - 1121.7	»		
	Toluene-Nit. (2) - Mar							364.00 - 368.60	1105.3 - 1119.3	»		
	Toluene-Nit. (2) - Apr							344.60 - 360.40	1046.4 - 1094.4	n»		
	Toluene- Comm (2)							332.00 - 343.00	1008.2 - 1041.6	»		
	Toluene- Octane (2)							388.75 - 392.45	1163.7 - 1174.7	«		
	Benzene (2) - March	439.00 - 439.00		1314.1 - 1314.1		928 - 928		391.80 - 393.70	1172.8 - 1178.5	«		
	Benzene (2) - April											
	Cyclohexane (2,4)	400.68 - 400.68		1348.6 - 1348.6		952 - 952						
	Cyclohexane (2,4,10)	396.70 - 396.70		1335.2 - 1335.2		942 - 942						
	Cumene (10,14), March		65.48		1443.6		1019					
	Phenol, Wt Avg - February		89.87		1981.3		1398					
	Phenol, Wt Avg - March		89.87		1981.3		1398					
	Styrene Contract - February	75.75 - 79.00		1670.0 - 1741.6		1179 - 1229						
	Styrene Net Industry Avg - February		68.32		1506.2		1063					
	Styrene (8) - March							60.00 - 67.00	1322.8 - 1477.1	«		
	Styrene (8) - April							64.00 - 66.00	1410.9 - 1455.0	n«		
	Polystyrene Contract - February	106.00 - 107.50		2336.9 - 2369.9		1649 - 1673						
	MXV Contract Index (Mar,2) / Spot Mar	364.00 - 364.00		1107.5 - 1107.5		782 - 782		393.50 - 402.45	1197.2 - 1224.5	»		
	MXV Contract Range (Mar,2) / Spot Apr	364.00 - 364.00		1107.5 - 1107.5		782 - 782		393.20 - 401.75	1196.3 - 1222.3	»		
	Paraxylene Contract (1) - March	85.13 - 85.13		1876.8 - 1876.8		1325 - 1325						
	Paraxylene Spot (4) - March							81.65 - 85.05	1800.0 - 1875.0	n«		
Paraxylene Spot (4) - April							81.65 - 85.05	1800.0 - 1875.0	n«			
DMT (1,1) - March	73.72 - 73.72		1625.2 - 1625.2		1147 - 1147							
PTA (1,7) - March	70.73 - 70.73		1559.3 - 1559.3		1101 - 1101							
PET Bottle Resin (1,9,Spot 12) - Mar	103.00 - 107.00		2270.7 - 2358.9		1603 - 1665		90.00 - 97.00	1984.2 - 2138.5	n-			
PET Large Buyer Net Trans (13) - Mar	92.00 - 92.00		2028.2 - 2028.2		1432 - 1432							
Orthoxylene (4)	59.00 - 59.00		1300.7 - 1300.7		918 - 918							
Phthalic Anhydride (5)	67.00 - 68.00		1477.1 - 1499.1		1043 - 1058							
<b>WEST EUROPE through Thu Mar 24</b>	Toluene (2,4,5)						344.8 - 351.4	1047.0 - 1067.0	n»			
	Benzene (2,6) - Mar	460.40 - 460.40		1378.0 - 1378.0		1001 - 1001	407.6 - 411.2	1220.0 - 1231.0	«			
	Benzene (2,6) - Apr						409.2 - 411.8	1224.8 - 1232.8	«			
	Cyclohexane (1,2,10) - Contract	481.60 - 481.60		1620.9 - 1620.9		1144 - 1144						
	Phenol (1,10)	93.40 - 93.40		2060.1 - 2060.1		1454 - 1454						
	Phenol, distribution (1)	90.00 - 94.50		1983.6 - 2082.8		1400 - 1470						
	Styrene (1,4,11) - Mar	85.50 - 87.10		1885.9 - 1921.3		1331 - 1356	67.1 - 67.8	1479.0 - 1494.0	»			
	Styrene (1,4) - Apr						67.3 - 67.9	1484.0 - 1496.0	»			
	Polystyrene (1,8) - Monthly	99.00 - 102.20		2182.0 - 2252.8		1540 - 1590	96.4 - 98.3	2125.3 - 2167.8	»			
	Mixed Xylene (2,4)						396.1 - 417.4	1205.0 - 1270.0	n»			
	Paraxylene - March	81.60 - 81.60		1799.4 - 1799.4		1270 - 1270	81.2 - 81.6	1790.0 - 1800.0	n-			
	Paraxylene - April						81.2 - 81.6	1790.0 - 1800.0	n-			
	DMT - February	71.70 - 71.70		1581.2 - 1581.2		1116 - 1116						
	PTA - February	83.90 - 83.90		1850.4 - 1850.4		1306 - 1306						
PET Bottle Resin (1)	99.60 - 102.20		2196.2 - 2252.8		1550 - 1590	101.5 - 104.1	2238.7 - 2295.3	-				
Orthoxylene (1,4)	60.70 - 60.70		1339.0 - 1339.0		945 - 945	60.3 - 61.2	1330.0 - 1350.0	n«				
Phthalic Anhydride (1)	72.00 - 74.60		1586.9 - 1643.6		1120 - 1160	72.6 - 75.2	1601.1 - 1657.7	n-				
<b>ASIA PACIFIC through Fri Mar 25</b>	Toluene (2)					FOB Korea	351.4 - 357.3	1067.0 - 1085.0	»			
	Benzene (2)	383.50 - 396.90		1148.0 - 1188.0		CFR China	358.0 - 363.9	1087.0 - 1105.0	n»			
		383.50 - 396.90		1148.0 - 1188.0		FOB Korea	380.8 - 394.2	1140.0 - 1180.0	«			
						CFR SEA	380.8 - 394.2	1140.0 - 1180.0	n«			
	Phenol (1)					CFR China	84.8 - 87.1	1870.0 - 1920.0	»			
	Styrene (1)					FOB Korea	62.6 - 62.6	1380.0 - 1380.0	«			
						CFR Taiwan	62.6 - 63.0	1380.0 - 1390.0	n«			
						CFR China	62.8 - 63.0	1385.0 - 1390.0	«			
	Polystyrene (1)					CFR Hong Kong	71.2 - 72.1	1570.0 - 1590.0	«			
	Mixed Xylene (2)					FOB Korea	392.8 - 407.6	1195.0 - 1240.0	»			
						CFR Asia	399.3 - 414.1	1215.0 - 1260.0	n»			
	PX Net (Cont-Mkt), CFR Asia (1,9) - Mar	75.07 - 75.07		1655 - 1655		FOB Korea	78.5 - 79.8	1730.0 - 1760.0	«			
						CFR Taiwan	79.4 - 80.7	1750.0 - 1780.0	«			
	PTA (1) - China Import CP, February	66.60 - 66.90		1468.0 - 1475.0		CFR A/Pacific	68.9 - 69.6	1520.0 - 1535.0	»			
PET Bot. Res. Unapproved					FOB Asia/Pacific	85.7 - 86.6	1890.0 - 1910.0	»				
PET Bot. Res. Approved					FOB Asia/Pacific	86.6 - 87.5	1910.0 - 1930.0	»				
Orthoxylene (1)					CFR A/Pacific	57.6 - 58.1	1270.0 - 1280.0	n«				
Phthalic Anhydride					CFR A/Pacific	59.9 - 60.3	1320.0 - 1330.0	n«				
<b>NOTES</b>	Not settled, previous monthly or quarterly price posted											
	<b>EXCHANGE RATES:</b>		<b>Unit per dollar</b>		n - Notional price range, no transactions				Changes from last week « prices moved lower » prices moved higher - prices are unchanged			
	Japan (Yen/\$)		81.03		All prices are a FOB works basis except							
	EURO (\$/EURO)		1.42		as modified by notes on next page.							
The current prices presented herein are strictly the opinion of CMAI and are based on information within the public sector and on assessments by the CMAI staff. CMAI makes no guarantee or warranty and assumes no liability as to their use.												

# CMAI Aromatics Market Report

<b>BASIC ENERGY MARKERS</b>		<u>United States</u>		<u>West Europe</u>		<u>Singapore</u>					
Crude Oil	103.75	\$/Bbl		115.78		115.25					
Natural Gas	4.23	\$/MM btu									
Naphtha	279.05	cnt/gal	1054	262.24	991	257.87	974				
ARU Raffinate	280.60		1052	-	-	-	-				
Regular Unleaded Gasoline	284.60		1010	278.91	990	284.95	1012				
Medium Unleaded Gasoline	289.92		1018	290.31	1019	290.02	1018				
Premium Unleaded Gasoline	297.90		1043	293.00	1026	293.18	1026				
<b>TOLUENE ALTERNATE VALUES</b>		<u>United States</u>		<u>West Europe</u>		<u>Singapore</u>					
T or X Octane (General value)	337	cnt/gal	1023	356	1081	328	997				
T or X Octane (Incr value)	333		1011	316	959	327	992				
T Octane (RBOB value)	369		1121	-	-	-	-				
HDA - Contract Basis	361		1097	389	1180	358	1089				
HDA - Spot Basis	322		977	336	1020	321	975				
TDP - Contract Basis	377		1145	409	1241	377	1144				
TDP - Spot Basis	374		1134	386	1173	370	1125				
STDP-Contract Basis	397		1206	429	1304	397	1205				
STDP-Spot Basis	398		1208	410	1246	394	1197				
<b>REFORMER INDICES</b>		<u>Cont</u>		<u>Spot</u>		<u>Cont</u>		<u>Spot</u>			
For Octane Blending			92		98				102		
BTX Extract. - Octane Basis	111		112	113	111	106			107		
BTX Extract. - Naphtha Basis	99		101	110	108	109			109		
<b>AROMATICS RELATED PRICES</b>		<u>United States - Mar</u>		<u>West Europe - Mar</u>		<u>Singapore - Mar</u>					
MEG fiber grade, (1)	62.14	cnt/lb	1370	1130.00	€/ton	1601.10	61.24		1350		
<b>SPOT TRADE PRESSURE CALCULATION (\$/Ton, positive values suggest profit incentive to move product)</b>											
all units are \$/ton											
		<u>Freight</u>	<u>BZE</u>	<u>TOL</u>	<u>STR</u>	<u>MXY</u>	<u>PXE</u>				
U.S. to W.E.		61	-5	-115	26	-34	-104				
U.S. to A/P		64	-73	-99	-79	-57	-137				
W.E. to U.S.		41	-97	13	-128	-68	2				
W.E. to A/P		77	-142	-58	-176	-97	-107				
A/P to U.S.		57	-48	-22	-42	-64	36				
A/P to W.E.		76	-11	-95	26	-56	-26				
<b>WEEKLY EIA STATISTICS</b>											
(Thousand Barrels/Day)		<u>Crude</u>	<u>Gasoline Inv. (Excl. MTBE)</u>		<u>Prod 'tn</u>	<u>Apparent</u>	<u>YTD Prod</u>	<u>YTD App</u>			
		<u>MM Bbls</u>	<u>Days Demand</u>	<u>MM Bbls</u>	<u>Volume</u>	<u>Demand</u>			<u>Demand</u>		
18-Mar-11	This Wk	352.8	21.0	220	9026	10481	8968	9775			
11-Mar-11	Last Wk	350.6	22.5	225	8744	9988	8753		9458		
19-Mar-10	Last Yr	351.3	22.4	225	9024	10035					
<b>PRICING NOTES</b>											
All Prices are FOB Unless Notes Indicate Otherwise.											
Price Range Covers From Day Following Previous Report Through This Reports Date.											
Before The 15th Of The Month, Prices Are For The Current Month Unless Noted.											
(1) Delivered or minimum freight allowed			(4) FOB			(7) Duty Paid			(10) Formula		
(2) Cents/gal			(5) FOB freight equalized			(8) Excludes Discounts			(11) CMAI Reference Price		
(3) Generally indicates FAS			(6) CIF			(9) Benchmark Price			(12) Asian - W Coast Divd, 4 wks		
(13) Large Buyer, commodity resin, dlvd in r/c to East Coast					(14) Price based on spot RGP price agreed in first week of current month.						

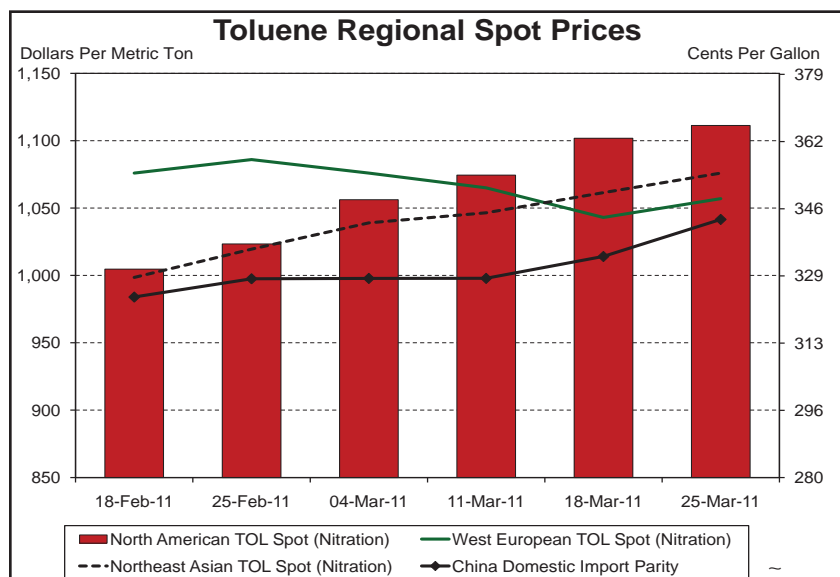
## CMAI REGIONAL CONTACTS

<b>HOUSTON</b>	<b>EUROPE</b>	<b>ASIA</b>
<p><b>Simon Palmer</b> - Benzene, Toluene, Mixed Xylene, Cyclohexane 1-281-752-3267</p> <p><b>Marc Laughlin</b> - Cumene, Phenol 1-281-752-3271</p> <p><b>Peter Feng</b> - Styrene, Polystyrene 1-281-752-3284</p> <p><b>Chase Willett</b> - Orthoxylene, Paraxylene, PTA, PET 1-281-752-3216</p> <p><b>Alex Lidback</b> - Aromatics 1-281-752-3288</p>	<p><b>Caroline Duggan</b> - Benzene, Toluene 44-207-766-6700</p> <p><b>Andrew Neale</b> - Cumene, Phenol, Styrene 44-207-766-6697</p> <p><b>Rob Peacock</b> - Mixed Xylene, Orthoxylene, Cyclohexane 44-207-766-6698</p> <p><b>Simon Moorhouse</b> - Benzene, Paraxylene, PTA 44-207-766-6685</p> <p><b>Martin Wiesweg</b> - PET, Polystyrene, EPS 49-211-7100-8114</p>	<p><b>Tatsuo Omi</b> - Benzene, Toluene, Xylenes 65-6501-1542</p> <p><b>Vince Sinclair</b> - Styrene, Polystyrene, Cumene, Phenol 65-6501-1537</p> <p><b>Alan Lu</b> - China PET, Asia PET 86-21-6109-0220</p> <p><b>Jie Su</b> - China Aromatics 86-21-6163-5470</p> <p><b>Ashish Pujari</b> - Paraxylene/PTA 65-6501-1540</p>

**TOLUENE**

**AMERICA**

After last week's surge the rise in spot prices has slowed but prices remain around \$3.70 per gallon. On the spot market, toluene continues to hold a "chemical" value, although spreads above blend value have narrowed. This being said, the recent buying for conversion has slowed slightly, while some direct consumer business has shown itself. The fact that U.S. pricing sits head and shoulders above the other regional markets has also dampened some of the enthusiasm. Spot activity has been light due to pre-NPRA conferences and travel. Looking at the week overall, average nitration grade toluene prices for March and April moved up by between \$0.03 and \$0.04 per gallon (\$9-\$12 per ton) to \$3.66 per gallon (\$1,112 per ton). Prices today (Thursday) closed out the reporting week between \$3.65 and \$3.75 (\$1,109 - \$1,139) for low dioxane material for April lifting. There remains a discernable discount below these levels for higher bromine D841 specification product. The spread between commercial and nitration grade products dropped back once again this week to average \$0.13 per gallon (\$39 per ton) due to more regular nitration grade material trading rather than higher-valued low dioxane material. On production operations, a power outage at a major Gulf Coast refinery did not impact toluene recovery. On trade, the idiosyncrasies of the international toluene market continue to mystify those accustomed to true commodity markets, but as suggested by the arb product is now at least trying to move from Asia to the U.S. While we can confirm vessel space booked in this direction it is not entirely clear what exact mix of products will move. The relative behavior of toluene prices either side of the Atlantic continues to contradict their nature as commoditized products with few open attempts to capitalize on the theoretical westbound arb. On margins, the gyrations in blend values continue with sufficient gains being made this week to cancel out last week's losses and bring the average back close to \$3.40 (\$1,033 per ton). Average BTX values made similar gains. As a result the volume-weighted average BTX premium over blend value remained static at \$0.44 per gallon (\$133 per ton). Incentives for toluene conversion across TDP-type units have recovered due to strong mixed xylenes values, with benchmark STDP margins also clawing back some of the ground they lost last week. For the trading week ending today (Thursday), spot business was confirmed for nitration grade material for March lifting at \$3.67 per gallon (\$1,115 per ton). April traded between \$3.62 and \$3.70 (\$1,099 - \$1,124). Commercial grade product was discussed mid-week but no spot business was confirmed done. Spot volumes fell sharply to 110,000 barrels (15,000 tons). Please note that there will be five weekly USGC toluene postings contributing to the March monthly spot average to be published on April 1st. The postings for week ending March 31st will be dated March 31st and will count towards the average for March.



**WEST EUROPE**

After taking a bit of a tumble last week, toluene spot prices have been relatively stable this week with the bid offer spread narrowing. The range for most of the reporting week has been notionally pegged at \$1050-\$1065 before widening out again to \$1040-\$1070 per ton at the time of writing. Gasoline blenders have continued to show some strong buying interest and at the beginning of the week a CFR Rotterdam deal was concluded at \$1055 per ton. Offers have since pulled back and the blenders are reluctant to step up as bids remain at around \$1040 per ton. Gasoline prices took a significant tumble last week with Euro-bob Oxy falling to the low \$900's, but this week has bounced back to \$950 per ton. The spread between gasoline and toluene has just about managed to stay above \$100, averaging \$104 per ton for the week. For the third week running, U.S. toluene prices have remained above Europe, although the spread between the two regions has narrowed and is not quite wide enough to beguile an arbitrage opportunity. HDA margins (based on spot) have continued weakening

and in the last couple of days slipped into negative territory for the first time since early January. STDP margins have also weakened but have some way to go before reaching negative numbers. Please note that there will be five weekly European toluene postings contributing to the March monthly spot average to be published on April 1st. The postings for week ending March 31st will be dated March 31st and will count towards the average for March.

## ASIA

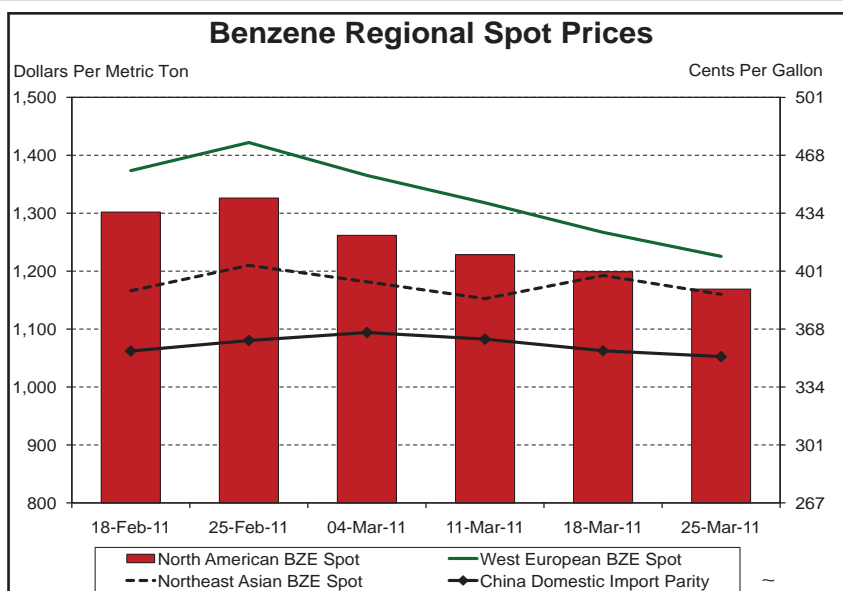
The Asian toluene market has been relatively quiet. Nonetheless, toluene prices rallied moderately up until Thursday to \$1,067–\$1,068 per ton FOB South Korea in line with increases seen in the Western regions. On Friday, driven by stronger crude, the Asian toluene price increased to \$1,075–\$1,085 FOB South Korea. This week U.S. toluene prices have been higher than Asia. Despite a substantial amount of Japanese refinery capacity suspended since the massive earthquake and tsunami, the remaining workable refineries have been operating at full rates and operations at restarted refineries have been increased. In addition, a substantial amount of gasoline imports have been fixed from South Korea. As a result, Asian toluene prices have been rising at a moderate rate. Driven by the surge in crude oil prices, the Asian naphtha price rallied sharply to \$985 per ton CFR Japan. The toluene price spread over naphtha has declined sharply by \$25 to \$90 per ton this week. However, the Asian naphtha price has been weak relative to crude oil, with the Brent and Japan naphtha price spread below \$100 per ton. JX Nippon Oil & Energy's Negishi refinery and refineries belonging to TonenGeneral at Kawasaki and Kyokuto Oil have all resumed operations at the time of writing. As a result, 850,000 barrels per day of CDU capacity has returned to operation. However, JX Nippon Oil & Energy's Sendai and Kashima refineries suffered more serious damage and are thus not expected to resume operations for quite some time. Although the LPG tank fire has been extinguished, it's not clear when Cosmo Oil's Chiba refinery will be able to resume operation. In total, 645,000 barrels per day of CDU capacity, or 14 percent of Japan's total CDU capacity, has been suspended. Mitsubishi Chemical's Kashima naphtha cracker complex has suffered serious damage, combined with critical damage at the port facility. It might take at least two months to restart the naphtha cracker. In addition, it's not clear when Maruzen's naphtha cracker will resume operation. Regarding toluene derivatives plants, Mitsui Chemical's TDI plant at Kashima has been suspended since the earthquake. Its toluene consumption capacity is approximately 7,000 tons per month. Outside Japan, Asia's robust toluene production continues. Asian naphtha cracker operations have remained high in line with positive olefin margins stemming from the tight C3 and C4 markets. Although the LPG price is currently much lower than the naphtha price, large-scale charging of LPG to crackers has not yet materialized. Pygas and associated toluene production from crackers remains ample in Asia with the exception of Japan. There is no indication of reduced Asian naphtha cracker operations for the time being. However, full-scale Asian naphtha cracker spring turnarounds will start from April and toluene supply will be reduced accordingly to some extent. The total refinery margin has been positive and refinery operating rates have been relatively high. Reformer operations have remained high accordingly. With the start of the gasoline season, toluene production from reformat is expected to decrease soon. The PX operating rate has remained high and associated reformers have been operating at high rates to maximize mixed xylenes production, with high toluene production following suit in order to maximize mixed xylenes production through TDP. In terms of demand, the mixed xylenes and toluene price spread increased by \$55 to \$140 per ton this week and the TDP margin improved substantially. However, toluene demand for TDP has been maximized for a long time already due to the extremely high PX margin. GS Caltex has decided to delay its MTPX turnaround from April to May or even June due to the large PX capacity loss of JX Nippon Oil & Energy. Its toluene demand is more than 80,000 tons per month. Toluene demand for HDA has been stable to supply benzene to integrated styrene and phenol. In China, the toluene price rallied to RMB8,156 per ton, while the import equivalent was \$1,042 per ton CFR. The Chinese toluene market price remained lower than the international price this week, although the price difference narrowed. The East China toluene inventory remained at 140,000 tons.

## BENZENE

### AMERICA

*Domestic consumption constraints broaden and act to pressure prices lower. On the spot market, the response to the events in Japan, and more broadly in N.E. Asia has been muted. The western markets have been comparatively weak this week and are reflecting some of the enhanced weakness seen in key derivatives such as styrene. The forward-looking implications of the shift in benzene balances in Asia has largely been ignored save for the expanded contango seen be-*

tween the prompt months and June. For the week overall, posted prices for March fell yet another \$0.10 per gallon (\$30 per ton) from last week and the mild contango to April and May has expanded. March averaged just over \$3.905 per gallon (\$1,169 per ton) while April averaged close to \$3.93 (\$1,176). On production operations, a short power outage at a major Gulf Coast refinery impacted output of benzene concentrate but did not significantly impact benzene recovery operations. On consumption operations, yet another issue raised its head late last week with Lyondell declaring force majeure on benzene purchases due to a downed POSM unit. Although in hindsight deliveries appear to have been largely rescheduled subject to a reduced allocation, the market reaction at the time reflected the uncertainty that such a



declaration conveys. Consumption constraints also remain in play at Flint Hills Resources, Sunoco and COSMAR, with IneosNova also reducing scheduled deliveries ahead of their upcoming turnaround at the Bayport styrenics complex. On trade, there has been little change this week as the western markets fall relative to Asia and Europe continues to show the weakest trends in price. The Gulf Coast continues to absorb product redirected from the U.S. East Coast. On margins, the xylenes chain is showing real strength in the BTX complex but this has not been sufficient to expand benchmark returns, except over naphtha. Benzene itself continues to falter and margins are still contracting. Benzene margin indicators remain poor, with the B-T spread falling to just \$0.14 per gallon (\$42 per ton) by the close of the week. THDA benchmark margins have continued to fall deeper into the red. Paraxylene continues to drive the STDP units forward, and margins have recovered some of the ground they lost recently. For the posting week ending today (Thursday), spot market deals were confirmed for March between \$3.83 and \$4.05 per gallon (\$1,146 - \$1,212 per ton). April barrels traded outright between \$3.87 and \$4.05 (\$1,158 - \$1,212) and also related to benchmark contract price. May material traded between \$3.905 and \$4.09 (\$1,169 - \$1,224) but the June market was quiet. Due to the combination of pre-NPRA travelling and a lackluster market, spot volume more than halved from last week to total 480,000 barrels, equivalent to 20 million gallons or 67,000 tons. Please note that there will be five weekly USGC benzene postings contributing to the March monthly spot average to be published on April 1st. The postings for week ending March 31st will be dated March 31st and will count towards the average for March.

**WEST EUROPE**

Spot prices have been on a clear downward trend this week following a few gyrations at the tail end of last week. Having initially hovered around \$1250 with some uncertainty as to which way the market wanted to move, prices have fallen to the low \$1200's, with April trading as low as \$1195 per ton. Interest for March material has been very thin this week with most attention turning to April. At times both months have been trading flat to each other and on occasion slipping into contango. The volatility seen last week has certainly calmed down as prices drifted downwards but are now reluctant to venture to far below the \$1200 per ton mark. With prices softening it is clear that the market is in a much better shape as imports are now arriving full swing and will continue to do so until mid-April. Planned turnarounds on crackers and aromatics units are still ongoing with April only seeing a marginal let up in lost benzene production. On regional spreads, all three regions have seen a fall in prices with the drop in Europe being more pronounced. The spread from the U.S. to Europe has narrowed and the arbitrage window is looking somewhat slim. Brent crude oil has mostly remained within the \$113-\$115 per barrel range and the benzene to crude ratio moved down from 1.56 to 1.47. Naphtha prices saw a marginal climb to \$988 per ton but with benzene heading back down this week the spread between the two has narrowed from \$300 to \$222 per ton. On trade, March changed hands within a range of \$1205-\$1245 per ton and April traded between \$1195 and \$1270 per ton. Overall spot volume for this week amounts to 25,000 tons. Please note that there will be five weekly European benzene postings contributing to the March monthly spot average to be published on April 1st. The postings

for week ending March 31st will be dated March 31st and will count towards the average for March.

## ASIA

Despite a strong energy market, the Asian benzene price fell from \$1,175–\$1,180 to \$1,140–\$1,155 per ton in a week due to the combination of a weaker and steep backwardated U.S. benzene market and the sluggish Asian styrene market. Boosted by the aftermath of the Japanese earthquake and tsunami, the Asian benzene price rose above \$1,200 per ton FOB South Korea on Tuesday last week, but this high price level was short lived. Although some Japanese benzene plants have resumed operations, lost capacity remains large at 1.3 million tons, or 22 percent of total Japanese capacity. However, there is no momentum in the Asian benzene market to keep prices high given the closure of the benzene arbitrage window to the U.S. In Japan, JX Nippon Oil & Energy's Negishi refinery and refineries belonging to TonenGeneral and Kyokuto Oil have all resumed operations at the time of writing. As a result, 372,000 tons per year of benzene capacity has come back online. However, damage at JX Nippon Oil & Energy's Sendai and Kashima refineries is more serious and it is expected that these refineries won't resume operation for quite some time. Although the LPG tank fire has been extinguished, it's not clear when Cosmo Oil's Chiba refinery will resume operations. Mitsubishi Chemical's Kashima naphtha cracker complex has also suffered serious damage, in addition to serious damage to the port facility, and it may take at least two months to restart. It's not clear when Maruzen's naphtha cracker will resume operation. Regarding benzene derivatives plants, Mitsubishi Chemical's phenol and Chiba styrene plants have been suspended since the earthquake. Benzene production loss has been larger than benzene demand loss. South Korean benzene players have fixed shipments totaling 30,000–40,000 tons of benzene to Japan in April. However, due to sluggish Chinese styrene import demand and the resultant low margin, some styrene producers are planning to reduce operations. Outside Japan, benzene supply has been persistently robust in Asia due to the combination of high operations at naphtha crackers, refineries/reformers and PX plants. Asian naphtha cracker operations remained high in line with the decent olefin margin stemming from tight C3 and C4 markets. Although the LPG price is currently much lower than the naphtha price, large-scale charging of LPG to crackers has not yet materialized. Pygas and associated benzene production from crackers remains ample in Asia. However, Shell has suspended its Singapore cracker since last Friday due to mechanical troubles after having just resumed operations from mid-March following the completion of a turnaround. The current suspension is expected to last around ten days. Shell also suspended its large styrene plant in line with the cracker shutdown. The total refinery margin has been positive and refinery operating rates have been relatively high. As a result, reformer operations have remained high. The PX operating rate has also remained high due to extremely strong margins, and associated reformer and TDP plants have followed suit. Driven by the surge in crude oil prices, the Asian naphtha price rallied sharply this week to \$985 per ton CFR Japan. Consequently, the Asian benzene price spread over naphtha has declined substantially by \$75 to \$175 per ton. The Chinese benzene price declined from RMB8,330 per ton to RMB8,250 per ton this week in line with the international benzene market; import parity declined from \$1,063 per ton CFR to \$1,054 per ton CFR. The Chinese benzene price remained much lower than the FOB South Korea price. The benzene price is currently lower than the mixed xylenes price in China.

## CUMENE / PHENOL

### AMERICA

There has been little-to-no improvement in the cumene supply situation over the last week. This continues to lead to depressed phenol operating rates and thus a very tight domestic phenol market. This tightness is leading to a sharp decline in phenol exports which has to be frustrating for North American producers given that the Northeast Asian phenol price is now over the \$1,900 per ton level. Some March Freely Negotiated business has been identified at an increase of just over 2 cents per pound from February's level (for reference: the benzene price increased by 0.54 cents per pound from February to March). Additionally, there are nominations out for increases of 2.5 cents per pound though nothing is known to have been concluded at that level at this time. Going forward, North American cumene supply is not likely to be much better off during April as the issues in the Northeast will be resolved around the first or second week of the month, followed shortly thereafter by Georgia Gulf going into turnaround on their 900 kta unit for approximately 40 days. Phenol price increases over any benzene price increases (or phenol reductions at levels less than any benzene price reduction if that is the case) are very likely in April given the aforementioned factors. Looking to overall economics for the phenol

chain, phenol's co-product acetone has seen an initial March settlement for the Large Buyer Monthly price at a decrease from February, despite the fact that the spot weighted average propylene price looks set to finish the month of March at a small increase over February's level.

### **WEST EUROPE**

Phenol consumers continue to tackle limited availability at some sites which will likely last until the end of the month when CEPASA restart one line at Huelva. Phenol cash costs look to be coming down considerably in April with benzene prices due to be negotiated next week and a considerable drop is on the cards based on where spot prices are now. This will add relief to phenol consumers who have been struggling to pass on rising feedstock costs onto customers in recent months. The propylene market on the other hand is on the tight side of balanced and some small increases are expected, although tight acetone markets are helping to offset higher propylene. Phenol demand remains good into almost all sectors and this is pushing the market tight through March.

### **ASIA**

The phenol price in East China recovered to above RMB15,000 per ton due to heightened concerns over April supply. Several parcels have been redirected or re-exported from China to Japan to make up for the production loss in the disaster zone. Meanwhile phenol demand in the Chinese domestic market remains depressed and is particularly true for the resin production industry. The weighted average price closed at RMB15,100 per ton, a RMB625 per ton increase compared with last week. Sinopec Gaoqiao PC raised its ex-factory price to RMB15,000 per ton on the heels of the rising spot price. China imported 66,100 tons of phenol in February according to the latest statistics. This represents a 7.8 percent increase year on year, although it dropped 3.2 percent from January. Operationally, Sinopec Yanshan PC will shut down its 50,000 ton/year phenol unit from April 1 for a 25-day turnaround, while Petrochina Jilin Chemical plans to conduct a two-week turnaround from April 11 on its 75,000 tons phenol unit. The recovery of the import market has accelerated and price ideas are notionally pegged at the \$1,900 per ton CFR China range, depending on ADD rates.

## **CYCLOHEXANE**

### **AMERICA**

It was a rather uneventful week in the U.S. cyclohexane market as the upstream benzene market continued to see downward movement and is now pointing to a lower contract settlement for that feedstock in the coming month. The spot benzene market finished this reporting week (end of Thursday) at levels close to \$3.75 per gallon, and while natural gas saw some slight gains which could result in higher hydrogen costs, we should see a significant drop in CHX prices for April. On supply, all domestic producers are believed to be running at steady rates with no operational issues to report. Meanwhile, the demand scenario remains unchanged as caprolactam production continues to run at high rates, and although one adipic acid producer appeared to have some slight mechanical issues this week, overall adipic acid rates are also believed to be at elevated levels. Furthermore, the caprolactam force majeure at Honeywell remains in place (at this point the outage is estimated to last through the third week of April), so CHX-based caprolactam producers may see some slight incremental business (amid the tight CPL market) in the near term.

### **WEST EUROPE**

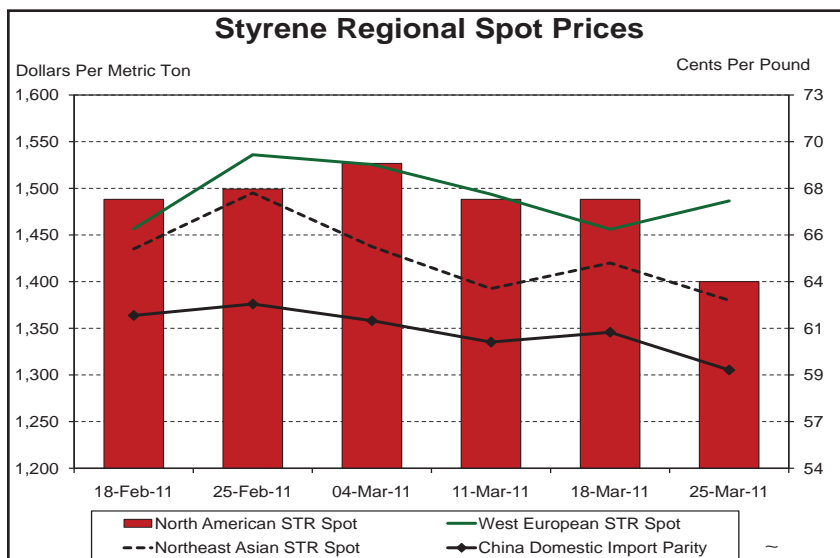
The cyclohexane market has again been quiet this week, with no reported production issues at producers or consumers in the region and supply remains healthy. Downstream demand has been good, with adipic acid and caprolactam producers running at high rates to meet domestic commitments and export demand. However they are running down inventories rather than increasing cyclohexane demand ahead of scheduled shutdowns in May. The negotiations for the Q2 delta settlement have just started and with a significant drop in the benzene price expected and expectations of a reasonably balanced market going forward, taking into account forthcoming maintenance shutdowns, attention may well focus on energy costs.

**STYRENE**

**AMERICA**

*LyondellBasell declares Force Majeure on March 18. March spot deals were concluded in a wide range this week. On the spot market, LyondellBasell declared Force Majeure on March 18 after a cooling tower failure caused one styrene line to shutdown. They continued to buy product owned by others in their system and purchased another 3 MM pound prompt March parcel at 67 cents per pound this week. With the export arb closed, product from Lake Charles owned by traders continued to bounce around the market in search of a buyer. On Wednesday, a 1 KT parcel was shopped in the market by a broker. There was some interest at the 63 to 64 cents per pound level but*

*logistics and volumes were not aligned. The only bid was at 60 cents per pound and this was ultimately accepted. The transaction was concluded between a trader and Louisiana producer and was confirmed with the seller, buyer and broker. This is nearly 5 cents per pound below the variable cost in March using contract raw materials and is nearly 1 cents per pound below the variable cost for April using spot raw materials. On production, LyondellBasell has one line down due to a cooling tower failure last Thursday. Allocations at this time are 100% so all commitments continue to be covered. Westlake also was forced to reduce rates after an unplanned shutdown of an ethylene cracker. Cosmar had their EB unit down but the status was not confirmed this week. Americas Styrenics has restarted and is operational. On inventory, traders continue to sit on product destined for the export market as they look for better netbacks by keeping the product in the domestic market. On costs and prices, spot benzene prices continue to weaken and have dropped under \$3.90 per gallon. Spot ethylene however continues to remain strong as crackers continue to experience operational issues. Variable costs based on incremental feedstocks are approximately 61 cents per pound for April. The only confirmed spot deals for March were in a wide range from 60 to 67 cents per pound. No deals were confirmed for April with the bid-ask range notionally at 64 to 66 cents per pound.*



**WEST EUROPE**

European styrene prices began the week at the \$1470 - \$1490 level for April material and quietly fluctuated, ending up at \$1480 - \$1490 per ton. This could be seen as trading water but with benzene prices drifting downwards, styrene gained some margin this week. News that LyondellBasell had suffered plant problems at its U.S. styrene unit also buoyed prices and whilst it remained unclear what the impact would be on Europe, uncertainty propped up prices and this was also helped by some improving volumes from the derivatives. Very little March business was discussed and the first recorded May deals were done early in the week at \$1470 and \$1480 per ton, slightly lower than April levels. The weekly average styrene/benzene spread pushed up to \$260 per ton for April, improving by \$60 over last week. These levels have not been seen since October and points the way for higher margins as benzene is looking a little softer and ethylene prices look stable through into April. PS producers have not been able to pass through March increases, however improving EPS off-take means that EPS producers have done so. Offline EPS capacity is now mostly back up following some scheduled turnarounds and demand should pick up in April helped by the season as well as lower styrene prices. The production problems in the U.S. could mean less imports coming across the Atlantic in the coming weeks, however this volume has been reduced in 2011 so Europe supply is not expected to be impacted.

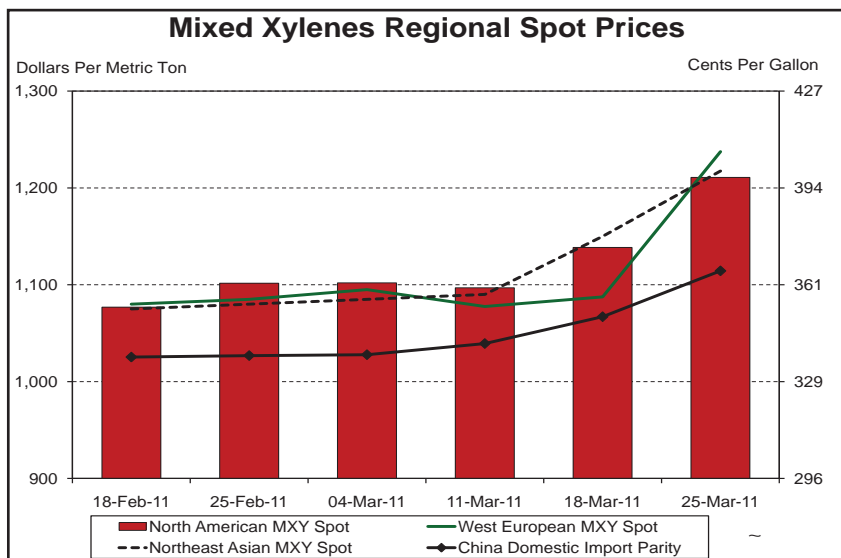
**ASIA**

Two weeks on from Japan's triple disasters, styrene chain pricing is back where it was before the earthquake, or in some cases lower. In the case of styrene, lower means worse since margins were already a catastrophe. Feedstock prices have declined, but styrene prices have come off more. The outages at Chiba Styrene and more recently Ellba Eastern in Singapore have done nothing to remedy the malaise and lift the gloom in the regional market. In fact sentiment and outlook have become even worse as a new regulation (actually more of a raised standard) in China requiring the use of non-combustible materials for insulation in building construction has cast a large shadow over the market. This has certainly set the EPS and styrene industries back on their heels for the short term, but it has serious long term implications if it becomes permanent. EPS absorbed nearly 2.5 million tons of styrene in China last year and is China's largest styrene end use representing a third of the total. Chinese EPS production accounts for 9 percent of world styrene demand. Construction consumes about half of Chinese EPS demand and therefore losing over a million tons of monomer demand at a stroke is no small matter. The EPS industry is hoping the regulation proves to be a temporary overreaction to the recent spate of building fires in China exacerbated by the shoddy work of construction companies utilizing substandard flame retardant EPS. In the meantime, sales into the construction sector have stalled, seller inventories are rising and confusion reigns. For the EPS and styrene markets, those were already replete with inventory, the timing could not be worse: seasonal demand that the market has been anticipating for weeks was just beginning to accelerate for construction use. In the case of styrene, domestic prices have taken the worst beating so far, dropping by RMB300-RMB400 per ton to RMB10,150 per ton ex tank. This is equivalent to a miserable \$1,297 per ton CFR, which is about the cost of feedstock alone for non-integrated Northeast Asian styrene producers. A thinly-traded international market threw out only a few price data points this week. Deals were done at \$1,380 per ton FOB Korea for 2H April and at \$1,385 and \$1,390 per ton CFR China for May. By Friday, the market was stabilizing close to these levels, but there were still more sellers than buyers. In company news, Showa Denko and Nippon Steel Chemicals have agreed to vertically integrate styrene production with the establishment of a joint venture company that will produce SM, benzene, toluene, and xylenes at NSC's manufacturing complex at Oita, Japan. The joint venture company, NS Styrene Monomer, will be established on August 1, 2011. NSC will have a 51 percent stake in the joint venture and Showa Denko will hold the remaining 49 percent, as it does currently in the NSC styrene units.

**MIXED XYLENES**

**AMERICA**

As the global market's "lender of last resort" Gulf Coast mixed xylenes remain in high demand. On the spot market, interest in additional exports to Asia continued to drive prices higher this week. Producer offers remained sparse, especially as some of their product continued to leave for N.W. Europe in support of balances on that side of the pond as well. Despite some stabilizing of spot prices in Asia, the U.S. market continued to be well-bid throughout the week, even inside of open arbitrage values. U.S. mixed xylenes still represents one of the few viable (but quickly declining) pools of product available to help meet the shortfalls elsewhere.



On average, posted spot prices rose by between \$0.23 and \$0.24 per gallon (\$70 - \$73 per ton) versus last week, averaging around \$3.98 (\$1,211) for March and April. Current firm ranges are between \$3.98 on the bid and \$4.05 on the offer (\$1,211 - \$1,232) for April. On production operations, one Gulf Coast major suffered a refinery-wide power outage which lasted around 12 hours, while another continues at reduced rates while working through some process limitations. On trade, Asian pricing stabilized somewhat this week and even showed some tendency to fall slightly but U.S. values continued to make gains bringing the two markets to near parity with each other by the end of the week. Gross daily netbacks to NE Asia averaged \$1,242 per ton (\$4.08 per

gallon) but absolute prices ended the week flat to this time last week at \$1,230 (\$4.04). Export activity to Asia has been active with cargoes booked from the Gulf Coast and Caribbean. Product was also fixed on a co-producer basis to N.W. Europe for late March and 1H April loading. On margins, strength in mixed xylenes helped average BTX prices (based on reformer yields) rise once again this week, despite lower benzene prices. Most energy markers were also higher however and as such profitability indices mostly held steady rather than improved. BTX returns over naphtha showed some improvement once again however. The gains in the xylenes chain were substantial enough to show through in both conventional TDP benchmark returns and also STDP margins which both showed gains. For the posting week ending today (Thursday), spot business was confirmed done for March at \$4.025 per gallon (\$1,225 per ton). April traded between \$3.91 and \$3.96 (\$1,190 - \$1,205), with higher heard done but not adequately confirmed. Total volume fell back this week to 260,000 barrels or 36,000 tons. Please note that there will be five weekly USGC mixed xylenes postings contributing to the March monthly spot average to be published on April 1st. The postings for week ending March 31st will be dated March 31st and will count towards the average for March.

## **WEST EUROPE**

The market has remained fairly tight to balanced this week. On supply, two refineries with associated mixed xylenes capacity are currently in scheduled maintenance turnarounds. On the back of higher prices in the xylenes chain in Asia and the U.S., bid levels on the Rotterdam spot market have increased sharply over this reporting week from \$1150 to \$1260 per ton FOB ARA. This is moving towards reopening the arb from the U.S., although USGC March prices have risen this week to around \$1230 per ton FOB. No offers have been heard in Europe, as prompt material is not being made available and no spot business has been reported done. Our notional range based on these factors is \$1205-1270 per ton FOB. Producers have again been looking to the U.S. for supply. This week, one producer fixed a 9KT parcel for loading USGC early April, whilst another fixed a 12KT shipment last week for late March loading. In distribution, product availability has been tight, although overall demand in March has been reported from some quarters as lighter than expected. Prices have remained at around the €20-€30 per ton FCA level.

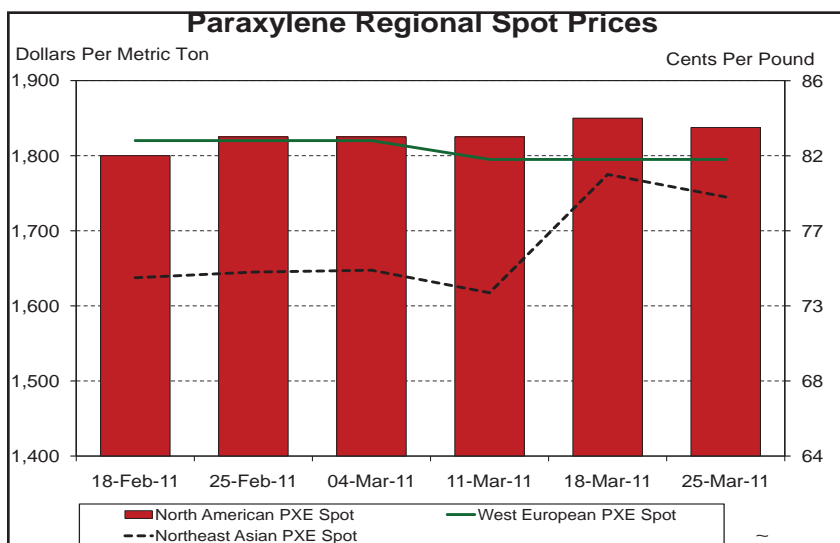
## **ASIA**

The Asian mixed xylenes market has been very quiet this week and liquidity has been very scarce. However, the Asian mixed xylenes price soared notionally to \$1,195-\$1,240 per ton on account of increased demand from Japan due to the large-scale capacity loss. The weekly average mixed xylenes price increased by \$68 per ton—the same magnitude as the US mixed xylenes price rally. This week the mixed xylenes price became higher than the benzene price, the first time this has occurred since mid-December 2010. Although JX Nippon Oil & Energy restarted its Negishi refinery from 21 March with mixed xylenes capacity of 500,000 tons per year, mixed xylenes capacity loss remains large at 1.5 million tons per year, or 22 percent of total Japanese mixed xylenes capacity. Mixed xylenes from JX Nippon Oil & Energy's Sendai refinery has been shipped to its PX plants, which have a capacity at 420,000 tons per year. The Kashima refinery's mixed xylenes are sufficient to meet the site's needs for PX production. JX Nippon Oil & Energy is expected to restart its Kawasaki PX plant shortly and it might have to secure mixed xylenes. Unfortunately, the Osaka refinery, which has mixed xylenes capacity of 100,000 tons per year, started a one-month scheduled turnaround from 11 March. Cosmo Oil has finally extinguished its LPG tank fire, but the resumption of operations at the refinery has not yet been scheduled. Mixed xylenes capacity of 270,000 tons per year has been lost since 11 March. Outside Japan, Asian mixed xylenes production has remained robust due to high refinery and TDP operations. In addition, new mixed xylenes capacities in China have started to operate at higher rates, bolstering mixed xylenes production in China. Guangxi PC in Qinzhou and Liayang PC has been contributing robust production in China. Although the Asian naphtha price rallied sharply in line with crude oil, the Asian mixed xylenes price over naphtha improved by \$30 to \$235 per ton. The mixed xylenes margin has thus improved, while the mixed xylenes margin from TDP has also increased. Although it decreased this week, the PX and mixed xylenes price spread remained extremely high. PX producers who buy mixed xylenes have been enjoying high profits. In China, the weekly average mixed xylenes price rallied from RMB8,365 per ton to RMB8,719 per ton; the import equivalent increased from \$1,067 per ton CFR to \$1,113 per ton CFR. No spot import mixed xylenes deals were detected this week due to the high international mixed xylenes price. The East China mixed xylenes inventory remained at 120,000 tons.

**PARAXYLENE**

**AMERICA**

North American PX markets remain tight with one U.S. producer still on allocation and little availability from international markets. Asian spot prices calmed some after last week's panic resulting from the crisis in Japan but are still elevated by \$70 per ton versus the current contract prices. This is better news for consumers than last week when spot markets were \$150 per ton above the contract. This still leads to an expected U.S. contract price increase in April but we have now dialed the increase back to around 5 cents per pound for an April USCP of 90 cents per pound. The supply constraints in North America will likely continue for much of the second quarter and this will keep the U.S. contract price at a larger net spread versus Asia than normal.



**WEST EUROPE**

Demand for paraxylene has continued to be strong in Europe from both PTA and DMT producers. On demand, all major consumers in the region are running well following the restart of a major PTA unit in the previous week. On supply, one paraxylene unit in the region is down for a scheduled shutdown and some toluene conversion capacity is also off line. Imports into the region have been limited recently but one regular supplier to Europe is now running again. There has also been some product reported coming in from Russia. There has been no reported spot business this week and our spot range is a notional \$1790 - \$1800 per ton.

**ASIA**

The PX market has gone extremely quiet, even as the impact of the Japanese earthquake becomes clearer. A few deals were reported among traders, but PTA producers are not looking at buying from the spot markets unless downstream PTA prices increase substantially. Spot markets were weaker toward the end of the week. Our price posting this week is \$1,750–\$1,780 per ton, and is notional on the low side. As reported last week, one of JX-NOC's plants in Kawasaki will restart sometime this month, though the exact schedule has not been made known. The plants in Kashima will remain shut for a longer period due to the damage to site infrastructure. We believe that some PTA plants are running short on PX as the force majeure announced by JX-NOC is affecting supplies and market sentiment, but this is a temporary relief as PX plants in Japan will take a long time to restore supplies. Idemitsu, ExxonMobil and JX-NOC have announced a nomination of \$1,800 per ton for April while S-Oil has announced \$1,810 per ton. Our forecast for April is \$1,750–\$1,775 per ton.

**TEREPHTHALIC ACID**

**AMERICA**

U.S. PTA demand is moderately strong and combined with both strong exports and tight PX supply, PTA supply is snug and likely limiting incremental PET production. PTA contract prices are likely to increase 3.8 cents per pound in April with 3.3 cents per pound from the increase in PX and 0.5 cents per pound from the upward adjustment of energy and the inflation factors.

**WEST EUROPE**

The PTA market is still fairly tight, although there are no reported issues with supply as all producers are expected to be running relatively hard. Demand has been very good and as we are at the start of the bottle resin season this should continue. PTA prices for February have been settled at the paraxylene cost increase of €73 per ton. March prices have not yet been settled although as most consumers are purchasing on a paraxylene cost plus formula we expect that prices will increase by the paraxylene cost increase of €26 per ton.

**ASIA**

Spot markets have been rising, although concerns about the tight credit market seem to have restricted the price upside in the short term. Spot prices (non-ADD) traded in the \$1,520–\$1,535 per ton CFR China range, closing the week at the upper end of the range. In the Chinese domestic markets, spot prices rebounded slightly, trading in the RMB11,550–RMB11,650 per ton range. Domestic prices continue to trade at a significant discount to import prices due to the tighter credit in domestic markets and limited import availability. A few domestic contracts in China have settled at RMB12,000 per ton in March, a small increase of RMB50 per ton over February. PTA product inventory across the chain remains very tight. To cope with the impending PX shortage, producers in Asia have announced shutdown plans during April and May that will take almost 15 percent of capacity offline. Even as downstream fiber demand has improved, buying sentiment remains mixed with buyers unwilling to place speculative bets given the current high prices and economic uncertainty under the current market scenario. Chinese PTA imports during February were around 393,000 tons, sharply down by 188,000 tons, or 32 percent, from January. Tight supply may push prices higher in the short term, but we expect the upside to be restricted by the relatively weak polyester prices, which need to increase further.

**POLYESTER BOTTLE RESIN****AMERICA**

PET producers continue to push for the bulk of their 7 cent per pound price increase in March. Most producers have announced an additional 5 cent per pound increase for April. Raw materials look to have increased around 3.85 cents per pound for March and we are forecasting costs to increase nearly 3 cents more in April. Producers are pushing to cover the raw material increases and expand margins given a relatively snug supply situation and good demand.

**WEST EUROPE**

Good domestic demand ahead of the bottle-season has been reported from the beverage segments. Nevertheless, converters in the important sheet segment report slower downstream demand as a result of recent price increases. Turkey has launched an anti-dumping investigation into imports of PET resins, regardless of the supplier. Imports into Turkey reached approximately 200,000 tons in 2010. It is expected that the investigation will take about nine months. On supply, following the good news that BP resumed normal PTA production at Geel in mid-March, the non-integrated PET suppliers have re-started most of the European production lines. But there are still supply restrictions in place as inventories need to be rebuilt. The industrial operating rate is increasing to a level of 73 - 78 percent. Materials remain tight but imports balanced the shortage in the market as seen over the last weeks. Offers for Asian materials increased to €550 per metric ton, DDP for supply in April. The CMAI contract price range is settling at a level of €1,550 - €1,590 per ton, up € from the previous week. Prices in the spot market remain at a level of €580 - €620 per ton.

**ASIA**

In the Asian PET markets, suppliers continued to hold their quotation levels firm in light of the tremendous cost pressure from the PX/PTA chain as well as sustained robust export demand. While prevailing offers were in the \$1,900–\$1,930 per ton FOB range this week, the buying attitude toward these offers continued to vary noticeably. Due to growing supply tightness in Europe, inquiries have remained active from European accounts and some of them have increased their bids to the low \$1,900s per ton for Asian imports. Buyers in other regions, including CIS, Russia and South America,

continued to strongly resist the high-priced offers as availability of lower-priced Chinese supplies impacted their buying sentiments. Spot prices for unapproved grade are assessed at \$1,890–\$1,910 per ton FOB this week. PET inventories at producers have fallen to a quite comfortable range on the back of steadily improving demand since February. More Asian suppliers have begun April negotiations.

### **CHINA**

In the Chinese domestic markets, prices for water grade resin have firmed at RMB14,100–RMB14,300 (\$1,709–\$1,733) per ton as the low-end transactions improved by around RMB200 per ton from last week. Operating rates among PET consumers have been slowly picking up due to seasonal factors. Given the volatility in the upstream markets and resin prices pegging at high levels, domestic accounts restocked cautiously to meet their short-term needs. Fostered by improved demand, overall PET operating rates began to rebound, returning to the high 70s among major Chinese suppliers. In the export markets, prices hovered around \$1,860–\$1,880 per ton FOB this week, but more negotiations improved to the upper end of the range late in the week.

## **ORTHOXYLENE**

### **WEST EUROPE**

The European orthoxylene market has been tightly balanced this week. On supply, one producer in the region is down for a scheduled maintenance turnaround and feedstock availability is tight. With no reported spot trade business this week our notional spot range remains similar at \$1330–\$1350 per ton FOB ARA. In phthalic anhydride, demand in Q1 has been ahead of 2010, and export demand from the Middle East & Africa has helped. Spot flake prices have been increasing, and are closer to €1200 per ton, which has helped producers to retain margins ahead of a further expected increase in raw material prices.

### **ASIA**

The Asian OX price declined to \$1,270–\$1,280 per ton CFR. The OX and mixed xylenes price spread fell sharply to \$38 per ton and the OX margin declined substantially. However, OX producers have not been in a hurry to sell OX due to the high PX margin. Two OX plants in Taiwan are in the midst of turnarounds together with PX plants until end-March. In China, CNOOC suspended an OX plant in line with a PX line outage. OX demand from PA has been critically reduced. The PA price also fell to \$1,320–\$1,330 per ton CFR in the quiet market. PA demand has been very sluggish. The Chinese OX price declined to RMB9,525 per ton; import parity was \$1,216 per ton CFR. The Chinese PA price declined to RMB9,412 per ton, with the Chinese PA price remaining lower than the Chinese OX price. The Chinese PA margin remained negative this week.

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