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# Argus Global Polyethylene

Polyethylene prices and global coverage

Issue 24-15 | Friday 12 April 2024

## HIGHLIGHTS

### US

Producers push for April price hike

### Latin America

Demand improves, though logistics problems remain

### Europe

Market weakening on low demand, improving supplies

### Russia and CIS

Prices stable for most PE grades

### Turkey

Market quiet amid Eid holidays

### Middle East

Quiet markets with Eid al-Fitr

### China

Prices rise as supplies fall, balancing demand

### Southeast Asia and Vietnam

Spot liquidity thins on the back of Eid holidays

### India

Stable prices as discussions stay limited

### Pakistan

Limited activity with Eid al-Fitr

### Dalian Futures Market

Tighter supplies support gains in PE futures

### Fundamentals to watch

Qatar's Muntajat declares force majeure on LLDPE  
 ExxonMobil to shut France Port Jerome petchem plant  
 Sabic to begin Geleen cracker closure this week  
 Choctaw ethylene near 2-year high to Mont Belvieu  
 US finalizes emission limits for chemical plants  
 IMF to upgrade global economic growth forecast

### Global polymer freight rates

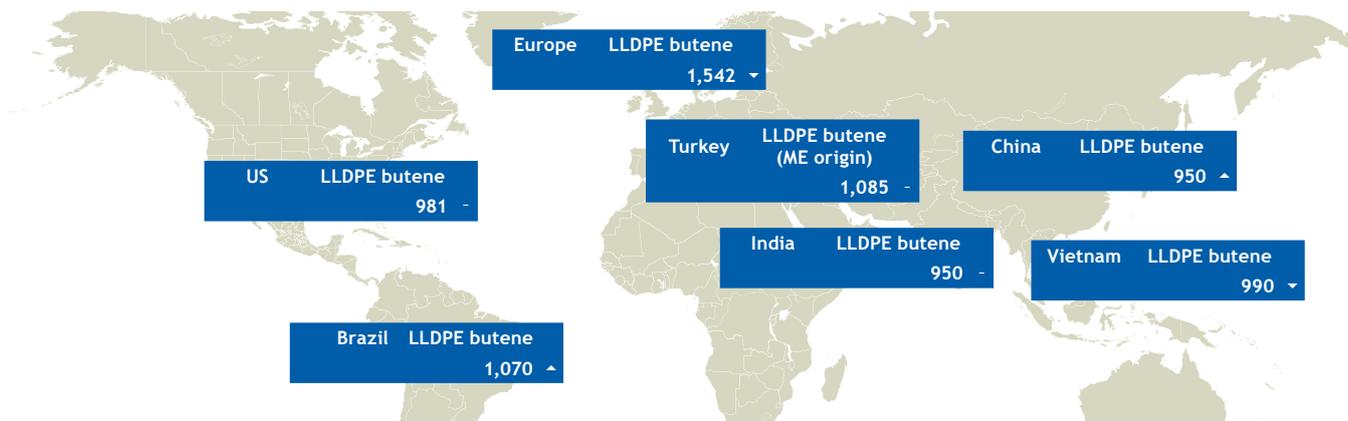
| Contract prices |        |                 |                                 | \$/t |
|-----------------|--------|-----------------|---------------------------------|------|
|                 | Timing | Contract marker | Argus Δ (month-on-month change) |      |

|                       |     |       |       |   |
|-----------------------|-----|-------|-------|---|
| <b>US</b>             |     |       |       |   |
| LDPE liner film       | Mar | 1,213 | 0.0   | - |
| LLDPE butene          | Mar | 1,102 | 0.0   | - |
| LLDPE hexene          | Mar | 1,146 | 0.0   | - |
| LLDPE octene          | Mar | 1,190 | 0.0   | - |
| HDPE injection        | Mar | 1,080 | 0.0   | - |
| HDPE HMW film         | Mar | 1,146 | 0.0   | - |
| HDPE BM               | Mar | 1,124 | 0.0   | - |
| <b>Western Europe</b> |     |       |       |   |
| LDPE liner film       | Mar | 1,670 | +85.1 | ▲ |
| LLDPE butene          | Mar | 1,542 | +63.9 | ▲ |
| HDPE injection        | Mar | 1,479 | +53.2 | ▲ |
| HDPE HMW film         | Mar | 1,510 | +53.2 | ▲ |
| HDPE BM               | Mar | 1,479 | +53.2 | ▲ |

| Spot prices |       |       |               | \$/t          |
|-------------|-------|-------|---------------|---------------|
|             | Basis | Price | 1 week change | 4 week change |

|                                      |                    |             |       |         |
|--------------------------------------|--------------------|-------------|-------|---------|
| <b>US exports</b>                    |                    |             |       |         |
| LDPE liner film                      | fas/Houston bagged | 1,036-1,102 | 0.0   | - 0.0   |
| LLDPE butene                         | fas/Houston bagged | 970-992     | 0.0   | - -77.0 |
| HDPE injection                       | fas/Houston bagged | 860-904     | 0.0   | - -66.0 |
| HDPE HMW film                        | fas/Houston bagged | 1,036-1,058 | 0.0   | - -22.0 |
| HDPE BM                              | fas/Houston bagged | 1,036-1,080 | +11.0 | ▲ -11.0 |
| LDPE liner film                      | dap/Laredo railcar | 926-970     | 0.0   | - -22.0 |
| LLDPE butene                         | dap/Laredo railcar | 860-948     | 0.0   | - -11.0 |
| HDPE injection                       | dap/Laredo railcar | 882-926     | 0.0   | - -11.0 |
| HDPE HMW film                        | dap/Laredo railcar | 948-992     | 0.0   | - -22.0 |
| HDPE BM                              | dap/Laredo railcar | 948-992     | 0.0   | - 0.0   |
| <b>Brazil</b>                        |                    |             |       |         |
| LDPE liner film                      | cfr                | 1,120-1,150 | 0.0   | - -65.0 |
| LLDPE butene                         | cfr                | 1,060-1,080 | +10.0 | ▲ -30.0 |
| HDPE injection                       | cfr                | 980-990     | -20.0 | ▼ -35.0 |
| HDPE HMW film                        | cfr                | 1,130-1,150 | 0.0   | - -50.0 |
| HDPE BM                              | cfr                | 1,130-1,150 | -15.0 | ▼ -45.0 |
| <b>West coast South America</b>      |                    |             |       |         |
| LDPE liner film                      | cfr                | 1,120-1,170 | +5.0  | ▲ -20.0 |
| LLDPE butene                         | cfr                | 1,050-1,080 | +15.0 | ▲ -25.0 |
| HDPE injection                       | cfr                | 970-980     | -5.0  | ▼ -30.0 |
| HDPE HMW film                        | cfr                | 1,130-1,150 | 0.0   | - -35.0 |
| HDPE BM                              | cfr                | 1,110-1,140 | -35.0 | ▼ -40.0 |
| <b>Northwest Europe</b>              |                    |             |       |         |
| LDPE liner film                      | del                | 1,276-1,489 | -38   | ▼ -101  |
| LLDPE butene                         | del                | 1,223-1,383 | -37   | ▼ -86   |
| HDPE injection                       | del                | 1,223-1,356 | -23   | ▼ -30   |
| HDPE HMW film                        | del                | 1,250-1,383 | -23   | ▼ -58   |
| HDPE BM                              | del                | 1,250-1,383 | -23   | ▼ -45   |
| <b>Russia and CIS</b>                |                    |             |       |         |
| LDPE 15803                           | cpt                | 1,263-1,378 | -20   | ▼ +3    |
| LDPE 15303                           | cpt                | 1,369-1,378 | -21   | ▼ -20   |
| LDPE 10803                           | cpt                | 1,280-1,329 | -22   | ▼ +9    |
| HDPE injection                       | cpt                | 1,272-1,289 | -19   | ▼ +8    |
| HDPE HMW film                        | cpt                | 1,245-1,289 | -20   | ▼ +3    |
| HDPE pipe/BM                         | cpt                | 1,263-1,343 | -20   | ▼ -29   |
| <b>Turkey</b>                        |                    |             |       |         |
| LDPE liner film Mid-east Gulf origin | cfr                | 1,150-1,160 | 0     | - -15   |
| LLDPE butene Mid-east Gulf origin    | cfr                | 1,080-1,090 | 0     | - -30   |
| LLDPE butene US origin               | cfr                | 1,050-1,070 | 0     | - -30   |
| HDPE HMW film Mid-east Gulf origin   | cfr                | 1,070-1,080 | 0     | - -60   |
| HDPE BM Mid-east Gulf origin         | cfr                | 1,090-1,100 | 0     | - -40   |
| HDPE HMW film US origin              | cfr                | 1,060-1,070 | 0     | - -25   |

GLOBAL SNAPSHOT



| Key prices      |                |        |                                |                                  |                              |                                  | \$/t           |
|-----------------|----------------|--------|--------------------------------|----------------------------------|------------------------------|----------------------------------|----------------|
|                 | US fas Houston | Timing | Western Europe contract marker | Turkey spot cfr (Mideast origin) | China spot cfr (main origin) | Southeast Asia dutiable spot cfr | India spot cfr |
| LDPE liner film | 1,036-1,102    | Mar    | 1,670                          | 1,150-1,160                      | 1,030-1,050                  | 1,080-1,100                      | 1,130-1,150    |
| LLDPE butene    | 970-992        | Mar    | 1,542                          | 1,080-1,090                      | 940-960                      | 1,000-1,020                      | 940-960        |
| HDPE HMW film   | 1,036-1,058    | Mar    | 1,510                          | 1,070-1,080                      | 950-990                      | 1,010-1,030                      | 980-1,000      |

| Spot prices                          |       |             |               |               | \$/t |
|--------------------------------------|-------|-------------|---------------|---------------|------|
|                                      | Basis | Price       | 1 week change | 4 week change |      |
| <b>Egypt</b>                         |       |             |               |               |      |
| HDPE HMW film Mideast Gulf origin    | cif   | 1,250-1,275 | +1            | -12           |      |
| LDPE liner film Mid-east Gulf origin | cif   | 1,300-1,325 | +1            | -12           |      |
| LLDPE butene Mid-east Gulf origin    | cif   | 1,150-1,220 | 0             | -5            |      |
| <b>GCC</b>                           |       |             |               |               |      |
| LDPE liner film                      | del   | 1,100-1,130 | 0             | -5            |      |
| LLDPE butene                         | del   | 1,020-1,070 | 0             | 0             |      |
| LLDPE hexene                         | del   | 1,200-1,220 | 0             | 0             |      |
| LLDPE octene                         | del   | 1,280-1,300 | 0             | 0             |      |
| HDPE HMW film                        | del   | 1,020-1,060 | 0             | 0             |      |
| HDPE BM                              | del   | 1,040-1,100 | na            | na            |      |
| <b>Jordan/Lebanon</b>                |       |             |               |               |      |
| LDPE liner film                      | del   | 1,170-1,190 | 0             | 0             |      |
| LLDPE butene                         | del   | 1,110-1,130 | 0             | 0             |      |
| HDPE HMW film                        | del   | 1,130-1,150 | 0             | 0             |      |
| <b>Saudi Arabia (CMP)</b>            |       |             |               |               |      |
| LDPE liner film                      | fob   | 1,017-1,037 | +8            | -15           |      |
| LLDPE butene                         | fob   | 927-947     | +3            | +15           |      |
| HDPE HMW film                        | fob   | 937-977     | 0             | -15           |      |
| <b>Northeast Asia</b>                |       |             |               |               |      |
| EVA foaming                          | cfr   | 1,250-1,300 | -25           | -25           |      |
| EVA photovoltaic                     | cfr   | 1,400-1,450 | 0             | +50           |      |

| Spot prices                        |               |                   |               |               | \$/t |
|------------------------------------|---------------|-------------------|---------------|---------------|------|
|                                    | Basis         | Price             | 1 week change | 4 week change |      |
| <b>China</b>                       |               |                   |               |               |      |
| EVA foaming                        | fob           | 1,300-1,350       | -25           | -25           |      |
| LDPE liner film Main origin        | cfr           | 1,030-1,050       | +7            | -15           |      |
| LDPE liner film All origin         | cfr           | 1,020-1,045       | +5            | -17           |      |
| LDPE liner film domestic           | import parity | 1,033.36-1,079.28 | +10.93        | -1.22         |      |
| LLDPE butene Main origin           | cfr           | 940-960           | +2            | +15           |      |
| LLDPE butene All origin            | cfr           | 930-950           | +5            | +10           |      |
| LLDPE butene domestic              | import parity | 924.28-964.47     | +8.13         | +5.31         |      |
| LLDPE hexene metallocene dutiable  | cfr           | 1,050-1,110       | +5            | +10           |      |
| LLDPE hexene metallocene duty free | cfr           | 1,120-1,195       | +5            | +15           |      |
| HDPE HMW film Main origin          | cfr           | 950-990           | 0             | -15           |      |
| HDPE HMW film All origin           | cfr           | 950-980           | 0             | -15           |      |
| HDPE HMW film domestic             | import parity | 924.28-952.98     | +5.25         | +2.45         |      |
| HDPE injection Main origin         | cfr           | 880-905           | +3            | +8            |      |
| HDPE injection All origin          | cfr           | 870-900           | 0             | +5            |      |
| HDPE BM Main origin                | cfr           | 905-920           | +3            | +18           |      |
| HDPE BM All origin                 | cfr           | 900-910           | +2            | +15           |      |

Notes: Main origin - Price of PE of GCC, Asean, South Korean and Indian origins. All origin - Price of PE, regardless of origin.

FEEDSTOCKS

Crude oil

Crude oil futures continued to hover around six-month highs this week with the Middle East political situation in focus.

As of 16:15 GMT on 12 April, the front-month Ice Brent contract was trading at \$91.75/bl, while the front-month Nymex WTI contract stood at \$87.17/bl.

Ethane

Mont Belvieu EPC ethane prices rose by 1.65pc during the

| Spot prices                              |       |             |               | \$/t          |  |
|--|-------|-------------|---------------|---------------|--|
|  | Basis | Price       | 1 week change | 4 week change |  |
| <b>Southeast Asia dutiable</b>           |       |             |               |               |  |
| LDPE liner film                          | cfr   | 1,080-1,100 | 0 -           | 0 -           |  |
| LLDPE butene                             | cfr   | 1,000-1,020 | 0 -           | -10 ▼         |  |
| <b>LLDPE hexene metallocene</b>          |       |             |               |               |  |
| LDPE HMW film                            | cfr   | 1,010-1,030 | 0 -           | -20 ▼         |  |
| HDPE BM                                  | cfr   | 1,000-1,020 | na            | na            |  |
| <b>Southeast Asia duty free</b>          |       |             |               |               |  |
| LDPE liner film                          | cfr   | 1,130-1,150 | 0 -           | +20 ▲         |  |
| LLDPE butene                             | cfr   | 1,060-1,100 | 0 -           | 0 -           |  |
| <b>LLDPE hexene metallocene</b>          |       |             |               |               |  |
| LDPE HMW film                            | cfr   | 1,200-1,220 | 0 -           | +20 ▲         |  |
| HDPE HMW film                            | cfr   | 1,050-1,090 | 0 -           | +5 ▲          |  |
| HDPE BM                                  | cfr   | 1,080-1,100 | na            | na            |  |
| <b>Vietnam</b>                           |       |             |               |               |  |
| LDPE liner film                          | cfr   | 1,100-1,120 | 0 -           | 0 -           |  |
| LLDPE butene                             | cfr   | 980-1,000   | -10 ▼         | -30 ▼         |  |
| HDPE HMW film                            | cfr   | 980-1,010   | -20 ▼         | -35 ▼         |  |
| HDPE BM                                  | cfr   | 970-990     | na            | na            |  |
| <b>Indonesia</b>                         |       |             |               |               |  |
| LDPE liner film Mid-east Gulf origin     | cfr   | 1,080-1,100 | 0 -           | 0 -           |  |
| <b>LLDPE butene Mid-east Gulf origin</b> |       |             |               |               |  |
| LDPE HMW film Mideast Gulf origin        | cfr   | 1,010-1,030 | 0 -           | -20 ▼         |  |
| <b>India</b>                             |       |             |               |               |  |
| LDPE liner film                          | cfr   | 1,130-1,150 | 0 -           | 0 -           |  |
| LLDPE butene                             | cfr   | 940-960     | 0 -           | -20 ▼         |  |
| <b>LLDPE hexene metallocene</b>          |       |             |               |               |  |
| LDPE HMW film                            | cfr   | 980-1,000   | 0 -           | 0 -           |  |
| HDPE BM                                  | cfr   | 1,000-1,020 | na            | na            |  |
| HDPE pipe PE100 natural                  | cfr   | 1,010-1,030 | 0 -           | -30 ▼         |  |
| HDPE pipe PE100 black                    | cfr   | 1,040-1,060 | 0 -           | -40 ▼         |  |
| <b>Pakistan</b>                          |       |             |               |               |  |
| LDPE liner film                          | cfr   | 1,110-1,140 | 0 -           | 0 -           |  |
| LLDPE butene                             | cfr   | 990-1,010   | 0 -           | -30 ▼         |  |
| HDPE HMW film                            | cfr   | 1,000-1,030 | 0 -           | -20 ▼         |  |
| <b>Bangladesh</b>                        |       |             |               |               |  |
| LDPE liner film                          | cfr   | 1,140-1,160 | 0 -           | 0 -           |  |
| LLDPE butene                             | cfr   | 1,020-1,040 | 0 -           | 0 -           |  |
| HDPE HMW film                            | cfr   | 1,040-1,060 | 0 -           | 0 -           |  |
| <b>Sri Lanka</b>                         |       |             |               |               |  |
| LDPE liner film                          | cfr   | 1,150-1,170 | 0 -           | -15 ▼         |  |
| LLDPE butene                             | cfr   | 1,030-1,050 | 0 -           | -25 ▼         |  |
| HDPE HMW film                            | cfr   | 1,080-1,100 | 0 -           | 0 -           |  |
| <b>Nepal</b>                             |       |             |               |               |  |
| LDPE liner film                          | cpt   | 1,200-1,230 | 0 -           | 0 -           |  |
| LLDPE butene                             | cpt   | 1,020-1,050 | 0 -           | 0 -           |  |
| HDPE HMW film                            | cpt   | 1,130-1,150 | 0 -           | -20 ▼         |  |

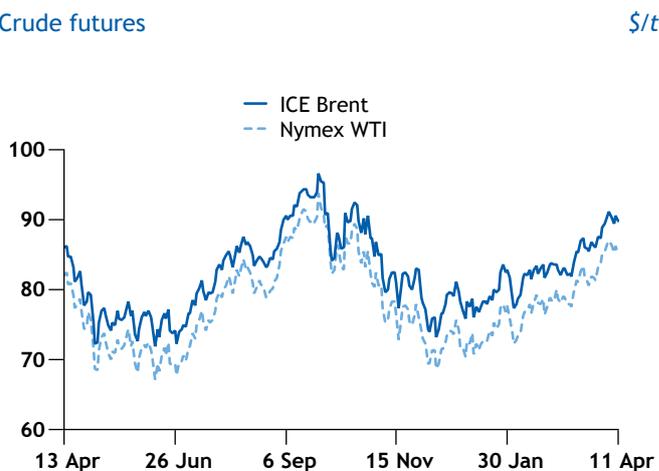
week, reaching 19.25¢/USG on 11 April, up from 18.9375¢/USG on 5 April, tracking gains in natural gas.

### Naphtha

In Europe, naphtha prices rose in the final trading session of the week as buying interest emerged. Gasoline blending demand saw an increase on the week as market participants pointed towards higher regional demand. Naphtha has so far averaged €14/t lower in April - compared to the March average of €653/t - and will average €6/t lower by the end of the month if prompt prices hold steady.

| Crude                                |                      |                |               | \$/bt    |      |
|--------------------------------------|----------------------|----------------|---------------|----------|------|
|                                      | Effective date       | Price          | 1 week change |          |      |
| Ice Brent                            | 12 Apr               | 90.45          | -0.72 ▼       |          |      |
| Nymex WTI                            | 12 Apr               | 85.66          | -1.25 ▼       |          |      |
| <b>Naphtha</b>                       |                      |                |               |          |      |
|                                      |                      |                |               | \$/t     |      |
|                                      | Effective date       | Price          | 1 week change |          |      |
| 70 min paraffin USGC water-borne del | 12 Apr               | 668.89         | -2.99 ▼       |          |      |
| 65 para NWE cif                      | 12 Apr               | 693.75         | +1.25 ▲       |          |      |
| Japan c+f                            | 12 Apr               | 703.13         | -6.12 ▼       |          |      |
| <b>Ethylene</b>                      |                      |                |               |          |      |
|                                      | Basis                | Effective date | Price         | ±        |      |
| del USGC contract                    | Mar                  | 1 Apr          | 28.25         | -1.00 ▼  | ¢/lb |
| del USGC contract                    | Mar                  | 1 Apr          | 622.81        | -22.05 ▼ | \$/t |
| del Europe contract                  | Apr                  | 3 Apr          | 1,260.00      | +40.00 ▲ | €/t  |
| del Europe contract                  | Apr                  | 3 Apr          | 1,364.52      | +43.3 ▲  | \$/t |
| cfr NE Asia                          | spot (1 week change) | 10 Apr         | 935.00        | 0.00 -   | \$/t |

### Crude futures



In Asia-Pacific, naphtha crack spreads continued narrowing this week as outright prices edged lower. Buying interest was mostly focused on cargoes arriving in the second half of May. Basis c+f Japan, naphtha closed at \$703.13/t on 12 April, down from \$709.25/t on 5 April.

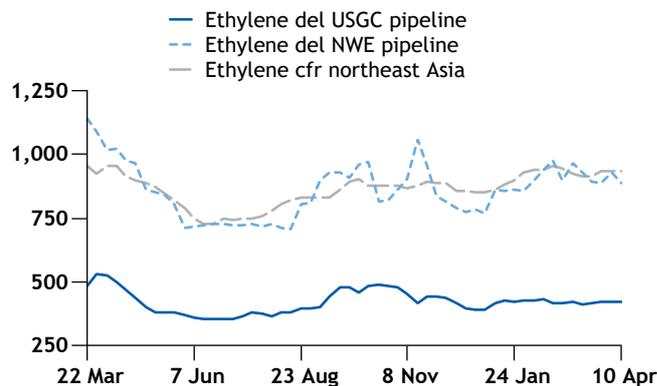
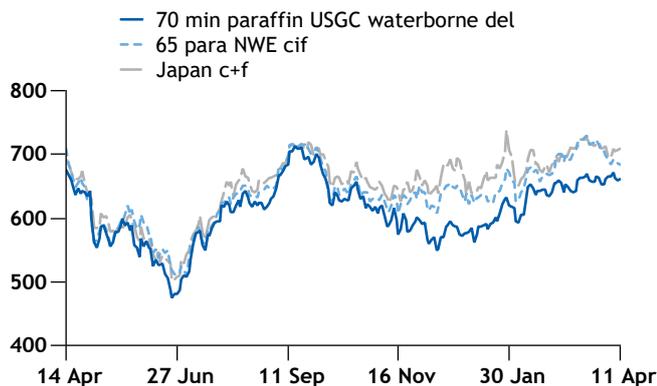
### Ethylene

The traded range for US spot EPC ethylene narrowed slightly to between 18.75-19.25¢/lb, even as Formosa's 862,000 t/yr mixed-feed cracker in Point Comfort, Texas, restarted following a planned turnaround. Nova Chemical's 880,000

Naphtha spot prices

\$/t Ethylene spot prices

\$/t



t/yr mixed-fed cracker in Geismar, Louisiana, has still not returned to operations following a planned turnaround that was set to end in March.

The European ethylene market balance remains manageable in April, owing to planned and unplanned derivative outages. Co-product propylene demand has also softened, allowing producers to ease the pressure on cracker operating rates. Assuming that plants are restarted on time, demand should improve by the end of April or beginning of May. Operational issues in France have seen one cracker shut along with its derivative units, while in Germany, refinery constraints are causing naphtha supply problems for crackers in the Cologne area. The spot market has been very quiet. Producers who have needed to dispose off material because of unplanned issues have largely been able to swap rather than sell. The European April monthly contract price (MCP) for ethylene settled on 2 April at €1,260/t, up by €40/t from the March MCP.

In Asia-Pacific, ethylene prices held steady in northeast Asia for the third consecutive week, but faced some downward pressure. Buying ideas from Chinese converters were hovering around \$900-920/t cfr China level, unchanged from the prior week. No firm offers were seen on a fixed-price basis. Offers on a floating basis were quoted at premiums of \$15-20/t to cfr northeast Asia prices for main port buyers, and \$30-40/t for distant buyers.

**Cracker margins**

In the US, margins at US crackers remain largely the same. Ethane cracking margins remain between 10-11¢/b, per Argus' generic model. Propane and butane cracking margins remain negative, but did improve slightly. Propane margins rose from -4.5¢/lb to -2.5¢/lb on declines in crude, while butane margins improved to -1¢/lb.

In Europe, cracker margins remain poor, despite higher

**Market highlight**

- Crude oil futures continued to hover around six-month highs this week with the Middle East political situation in focus

demand. However, the recent increase in discounts for propane and butane compared with naphtha will have been a boost for producers with LPG feedstock flexibility.

In Asia-Pacific, naphtha cracker margins improved for a second consecutive week, settling at -\$144/t, up by \$34/t midweek. Propane cracker production margins declined to a three-month low of -\$50/t, down by \$31/t.

**PRICING ANALYSIS**

**US**

After March contracts in the US polyethylene (PE) market settled flat, producers will try again in April to push through a 3¢/lb price increase. Producers argue that export demand remains strong, domestic demand is picking up, and that some large-volume buyers are still paying too close to the export price level to incentivize producers to sell to them rather than to the export market. However, buyers are continuing to resist price hikes, arguing that domestic demand is not strong enough to support higher prices, particularly with new capacity continuing to add more volume to the market.

Spot availability in early April is improving, but some grades remain stubbornly snug. Offgrade material is also in short supply. Spot prices are steady, with producers attempting to roll over prices from March.

PE operations are little changed, with a few ongoing

supply constraints. A Texas high density polyethylene (HDPE) blow molding turnaround is expected to continue through the end of the month. A HDPE high molecular weight film unit was heard to be having some operational problems this week. A few other minor issues were heard in the market, but nothing that was expected to significantly impact supply.

Preliminary March data from the American Chemistry Council (ACC) showed total production reached a new record of 5.36bn lb, with plants running on average at around 86.9pc of total capacity, according to the ACC's Plastics Industry Producers' Statistics Group as compiled by Vault Consulting. HDPE production rose by 5.1pc to 2.224bn lb, with plants running at 85pc of total capacity. Low density polyethylene (LDPE) production rose sharply to 837mn lb, up by 13.6pc from February, with plants running at around 91pc of total capacity. Linear low density polyethylene (LLDPE) output totaled 2.3bn lb, up by 1.37pc from February, with plants running at around 87pc of total capacity.

Total March sales rose to 5.297bn lb, just shy of the record 5.3bn lb in August 2023. March sales were up by 2.45pc from February levels, with exports down by 1.5pc and domestic sales up by 6.1pc over the period. HDPE sales rose by 7.1pc in March versus February, with domestic demand up by 10.2pc and exports up by 2pc. LDPE sales fell to 741mn lb, down by 3.9pc from February, with domestic sales up by 2.17pc and exports down by 10.9pc over the period. LLDPE sales rose by 0.5pc with exports down by 1pc and domestic sales up by 2.5pc over the period.

With total output surpassing sales, producers added around 64mn lb to inventories in March, with a 96mn lb build in LDPE, an 18mn lb build in HDPE and a 50mn lb draw in LLDPE inventories.

In April, domestic demand continues to improve on seasonal factors, with buyers and suppliers saying their order books are looking stronger at the beginning of the second

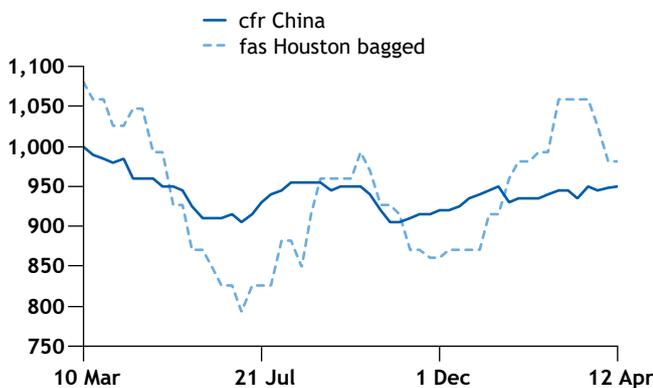
| US contracts    |        |                                 |                 |              | €/lb |
|-----------------|--------|---------------------------------|-----------------|--------------|------|
|                 | Timing | Argus Δ (month-on-month change) | Contract marker | Low / High ± |      |
| LDPE liner film | Mar    | 0.0                             | 55.00           | 0.0/0.0      |      |
| LLDPE butene    | Mar    | 0.0                             | 50.00           | 0.0/0.0      |      |
| LLDPE hexene    | Mar    | 0.0                             | 52.00           | 0.0/0.0      |      |
| LLDPE octene    | Mar    | 0.0                             | 54.00           | 0.0/0.0      |      |
| HDPE injection  | Mar    | 0.0                             | 49.00           | 0.0/0.0      |      |
| HDPE HMW film   | Mar    | 0.0                             | 52.00           | 0.0/0.0      |      |
| HDPE BM         | Mar    | 0.0                             | 51.00           | 0.0/0.0      |      |

| US exports      |                    |       |               |   | €/lb          |
|-----------------|--------------------|-------|---------------|---|---------------|
|                 | Basis              | Price | 1 week change |   | 4 week change |
| LDPE liner film | fas/Houston bagged | 47-50 | 0.0           | - | 0.0 -         |
| LLDPE butene    | fas/Houston bagged | 44-45 | 0.0           | - | -3.5 ▾        |
| HDPE injection  | fas/Houston bagged | 39-41 | 0.0           | - | -3.0 ▾        |
| HDPE HMW film   | fas/Houston bagged | 47-48 | 0.0           | - | -1.0 ▾        |
| HDPE BM         | fas/Houston bagged | 47-49 | +0.5          | ▲ | -0.5 ▾        |
| LDPE liner film | dap/Laredo railcar | 42-44 | 0.0           | - | -1.0 ▾        |
| LLDPE butene    | dap/Laredo railcar | 39-43 | 0.0           | - | -0.5 ▾        |
| HDPE injection  | dap/Laredo railcar | 40-42 | 0.0           | - | -0.5 ▾        |
| HDPE HMW film   | dap/Laredo railcar | 43-45 | 0.0           | - | -1.0 ▾        |
| HDPE BM         | dap/Laredo railcar | 43-45 | 0.0           | - | 0.0 -         |

quarter. However, the economy continues to face some headwinds. Inflation remains persistently high, leading to concerns that the US Federal Reserve may not cut interest rates as quickly as was initially expected. The US Consumer Price Index rose 3.8pc in March on an annual basis, not including food and fuel prices, which was a stronger reading than economists had expected.

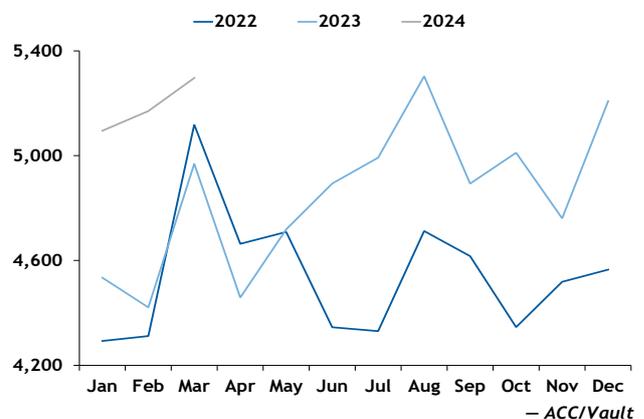
In the export market, buying activity is starting to slow with global buyers purchasing only as needed in anticipation of lower prices in the future. Traders said they are not building inventory now, and only focusing on back-to-back deals, believing that prices could fall by 2-3¢/lb in May or June.

US vs China LLDPE film prices



\$/t US, Canada polyethylene sales

mn lb



## Mexico

Demand in Mexico slowed during the week after a burst of activity last week, as buyers purchased what they need for immediate use, and continued to wait for prices to fall further. Buyers are shopping around, searching for lower prices, and for now they are cautious and willing to wait.

There were reports that some lower prices were circulating in the market, either due to some short selling, or due to one trading firm selling excess inventory below replacement costs.

Local producer Pemex was heard to only be running the low density polyethylene (LDPE) unit during the week. Efforts to restart the linear low density polyethylene (LLDPE) unit were heard to have been unsuccessful for now.

The other local producer, Braskem Idesa was heard to be offering material at aggressive prices, as much as 1-2¢/lb below imported material. Sources said they believed Braskem Idesa has taken down its LDPE unit for maintenance. The company is said to have enough inventory to meet its needs.

## Latin America

Brazilian polyethylene (PE) demand improved this week with macroeconomic factors sustaining resin contracts across the country.

Inventory building also helped, with large corporate buyers in the northern port of Manaus hurrying to secure three months of additional resin stock to face a possible drought during the second half of the year. Last year the region suffered from low water levels in the Amazon and Negro rivers which made deliveries only possible by air or road. In the city of Manaus sits Brazil's largest industrial free trade zone.

In the country's southern region, demand also improved week-over-week. However, logistics problems in the port of Navegantes are still impacting deliveries to Santa Catarina state. *Argus* heard a single major shipping company authorized to dock at the port, with all the others bypassing Navegantes. Some cargoes are delayed for two months, one source told *Argus*.

In the west coast South America (WCSA), *Argus* heard improved demand for high density polyethylene (HDPE) in the markets of Peru and Colombia. Chilean PE demand, on the other hand, was heard lower this week.

In the southern cone, *Argus* heard the Brazilian PE manufacturer very aggressive with prices and conditions in the markets of Argentina, Paraguay, and Uruguay, with discounts of \$100/t. One local source said the company is trying to gain some additional market share in those countries to balance its losses caused by PE imports into Brazil, which hit a record 1.400mn t last year, increasing 11pc from 2022.

PE prices in Brazil and the west coast of South America

were mixed this week, with low density polyethylene (LDPE) and linear low density polyethylene (LLDPE) prices flat to higher and HDPE prices stable to lower when compared to the previous week.

PE supply into South America was normal during the week, with readily available offers from the US and Asia. Middle Eastern offers were lower due to the Eid holiday in the region.

On the macroeconomic front, a positive economic scenario favors Brazilian demand for polyolefins. The retail sales volume reached a record, growing for the second consecutive month, pushed by the fall in interest rates, credit expansion, and the increase in earnings. In February, retail sales volume increased 9.7pc from February 2023, cumulating an 8.2pc growth from January to February year-on-year.

However, local production continues to be pressed by imports. PE imports in March jumped 40pc from March 2023 to 168,900t, priced at the average of \$1,193/t, 12pc higher month-on-month. North American sellers climbed from 73pc market share to 82pc at the average price of \$1,114/t fob, while South Americans fell from 15pc to 7pc at \$1,272/t fob, and Africa-Middle East went up from 5pc to 6pc at \$1,137/t fob.

Meanwhile, PE exports in March declined 17pc month-on-month to 43,100t at an average monthly price 5pc higher of \$1,353/t. South American buyers continued leading with 57pc of market share although the region has lost seven percentage points, reducing by 8,300t the volume acquired at the average price of \$1,212/t. Asia-Pacific acquisitions increased 3,000t, gaining 10 percentage points to 26pc at \$1,560/t.

In Argentina, according to INDEC's official data, the manufacturing industry's production continues to decline. In February, it fell 9.9pc from February 2023, cumulating a decrease of 11.1pc in the first two months year-on-year. Production of plastics-manufactured products shrank 11.3pc in February month-on-month and 11pc year-on-year. The automotive industry's production fell 18pc in the monthly and yearly comparison.

On par with decreased industrial output, Argentinian PE demand is low. Domestic PE prices were heard at the \$2,000-2,100/t range.

In Peru, PE imports reduced by 5pc in March month-on-month to 28,000t at the average price of \$1,103/t, 11pc lower than March 2023. Even so, in the first quarter of this year, Peru imported 91,000t, 21pc more year-on-year, with North America expanding its market share from 57pc to 73pc at an average monthly price of \$1,055/t. South American sellers' market share shrank from 17pc to 13pc at \$1,004/t and Asia-Pacific from 16pc to 9pc at \$1,320/t.

### Europe

The European polyethylene (PE) market is showing signs of weakening amid low underlying demand and gradually improving supplies, despite remaining limited for prompt deliveries. Sentiment remains cautious albeit with a divergence of pricing perspectives emerging between buyers and producers.

With the settlement of feedstock ethylene’s April monthly contract price (MCP) at a €40/t increase, producers are focused on defending margins by passing on the full cost increase to PE contracts. Producers argue that margins remain weak - despite having widened in the first quarter - and that any decreases would hurt the financial sustainability of their operations. An example of this manifesting was ExxonMobil announcing this week the permanent shut down of its Gravenchon cracker in France and the associated derivative plants at the site - among which is a 420,000 t/yr HDPE-LLDPE swing plant.

Many producers also depleted inventories in the first quarter, after having faced higher than expected demand - owing to the delay in imports from the Middle East and Asia amid shipping disruption in the Red Sea. As such, some producers have focused their efforts in April to rebuild stocks. Some plant outages have also contributed to keeping prompt supplies tight and producers have generally increased PE plant run rates in recent months. But producers are trading carefully and continue to exercise discipline on operating rates, being mindful of risks of supply overhang emerging from increased run rates.

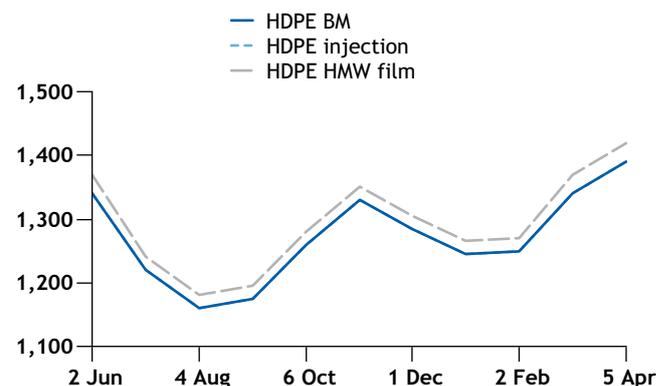
Buyers argue that PE contract prices have faced sharp and disproportionate increases in the first quarter, which resulted in the emergence of a disconnect to spot prices - and to the global markets. And with low underlying demand for their finished products, many buyers see little to no room for further increases in PE contract prices. This was also as PE spot prices plateaued in March and have been decreasing since, with some buyers reporting as much as a €50/t month-on-month decrease in April. Stock positions vary among buyers, with some having replenished volumes in previous months, leaving them more comfortable to defer part of their offtakes to benefit from lower prices for forward-delivery volumes. These buyers may take a firmer stance on PE contract negotiations in April. But others may still face a more acute need to restock or are constrained in their abilities to substitute grades owing to stringent specification requirements, which might reduce their leverage to influence PE contract negotiations. And demand, although weak, has shown some variance across the spectrum with segments such as packaging holding in better shape. In contrast,

| Western Europe contracts |        |                                 |                 |              | €/t |
|--------------------------|--------|---------------------------------|-----------------|--------------|-----|
|                          | Timing | Argus Δ (month-on-month change) | Contract marker | Low / High ± |     |
| LDPE liner film          | Mar    | +80.0                           | 1,570           | +60.0/+150.0 |     |
| LLDPE butene             | Mar    | +60.0                           | 1,450           | +50.0/+105.0 |     |
| HDPE injection           | Mar    | +50.0                           | 1,390           | +30.0/+80.0  |     |
| HDPE HMW film            | Mar    | +50.0                           | 1,420           | +30.0/+80.0  |     |
| HDPE BM                  | Mar    | +50.0                           | 1,390           | +30.0/+80.0  |     |

| Northwest Europe spot |       |             |               |               | €/t |
|-----------------------|-------|-------------|---------------|---------------|-----|
|                       | Basis | Price       | 1 week change | 4 week change |     |
| LDPE liner film       | del   | 1,200-1,400 | -13 ▼         | -63 ▼         |     |
| LLDPE butene          | del   | 1,150-1,300 | -13 ▼         | -50 ▼         |     |
| HDPE injection        | del   | 1,150-1,275 | +1 ▲          | +1 ▲          |     |
| HDPE HMW film         | del   | 1,175-1,300 | +1 ▲          | -25 ▼         |     |
| HDPE BM               | del   | 1,175-1,300 | +1 ▲          | -12 ▼         |     |

West Europe HDPE contract prices

€/t



demand remains poor from the construction segment, and this week’s decision by the European Central Bank to keep interest rates unchanged at a record high level will provide little short-term relief.

Negotiations are getting underway in many cases and it remains to be seen which way the wind blows. But many market participants hold the view that any increases beyond the €40/t increase in feedstock ethylene’s MCP are unrealistic for PE contract prices in April. Likewise, many also view any decreases to be outliers at this stage, in spite of some buyers’ attempts to secure these within April. There have been some settlements reported at a €20/t increase for HDPE contracts, but it is early to conclude if this could be widely seen as the outcome for PE contracts in April. It is likely that some producers will be firmer in defending contractual margins by recovering the cost increase in full, while others might take a more moderate stance, depending on stock levels of particular PE grades and underlying prices.

For all PE grades, the preliminary assessments of the Argus deltas for April will be made next week.

PE spot prices remain in wide ranges with buying interest yet to see a revival after the Easter holidays. Many distributors are focused on keeping volumes moving and are pricing their offers at competitive levels to encourage offtakes. These are mainly setting the low end of the spot price ranges, which stand at relatively narrow gaps to import parity prices for forward delivery. Some buyers continue with their attempts to drive spot prices for prompt delivery to around import parity levels, but the transactability of these lower bids remains unclear for now. Meanwhile, the high end of the spot price ranges are mainly being set by producers' asking levels, which have been largely unchanged from March. Some producers remain uninterested in reducing offers as they are focused on replenishing stocks, while others may have opted to show some flexibility on pricing spot volumes. With underlying demand low, it remains to be seen if producers come under more pressure to reduce prices in the coming weeks as their inventories replenish.

The spot price of LDPE was assessed at €1,200-1,400/t ddp northwest Europe – down by €25/t at the low end and stable at the high end.

The spot price of LLDPE butene was assessed at €1,150-1,300/t ddp northwest Europe – down by €25/t at the low end and stable at the high end.

Spot prices of all HDPE grades were assessed unchanged this week, reflecting the range of indications heard.

### Russia and CIS

PE prices in Russia were mostly stable this week, except for LDPE-grade 10803, which became a bit cheaper as the volumes produced by Rosneft's Angarsk polymers plant appeared in the central part of Russia for the first time since the beginning of February.

The prices range for LDPE-grade 10803 widened to Rbs120,000-124,583/t (\$1,280-1,329/t) cpt Moscow, from Rbs121,667-123,333/t a week earlier. The prices for Bashneft's Ufaorfsintez product inched up as the supplies became

limited. Prices for LDPE produced by Sibur's Kazanorgsintez and Belarussian Polymir plant were unchanged.

Meanwhile, LDPE volumes produced by Angarsk polymers plant were offered this week in the central part of Russia for Rbs120,000/t cpt Moscow.

LDPE-grade 15303 was assessed at Rbs128,333-129,167/t (\$1,369-1,378/t) cpt Moscow, compared with Rbs127,500-130,000/t. The product produced by Ufaorfsintez was sold out in the first week of April. Prices for LDPE volumes produced by Sibur's Tomskneftehim were offered by traders at slightly higher prices as cheaper volumes were sold out.

Prices for LDPE-grade 15803 were assessed unchanged.

Prices for all HDPE grades were assessed unchanged this week owing to supply and demand balance in the market. Only the price for HDPE film grade produced by Uz-Kor Gas Chemical in Uzbekistan declined this week amid low demand.

### Turkey

Polyethylene (PE) import prices in Turkey rolled over this week. There was no activity in the market this week because of the Eid-al-Fitr holidays. But starting next week, the market is expected to pick up again and demand will gradually increase towards May. Although stocks are at a good level at present, as it is the start of the season, stock levels are expected to fall and demand will increase in May.

Middle East-origin HDPE film was assessed at \$1,070-1,080/t cfr, Middle East-origin HDPE blow moulding at \$1,090-1,100/t cfr and US-origin HDPE film at \$1,060-1,070/t cfr.

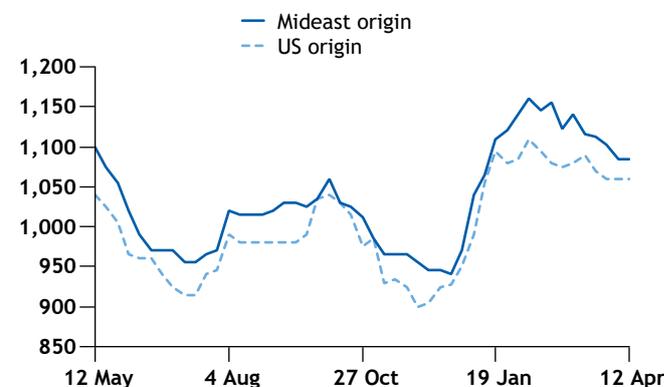
Middle East-origin LDPE was assessed at \$1,150-1,160/t cfr.

Middle East-origin LLDPE butene was assessed at \$1,080-1,090/t cfr this week, while US-origin LLDPE butene was assessed at \$1,050-1,070/t cfr.

| Russia and CIS domestic |             |                 | Roubles/t     |               |
|-------------------------|-------------|-----------------|---------------|---------------|
|                         | Basis       | Price           | 1 week change | 4 week change |
| LDPE 15803              | cpt inc VAT | 142,000-155,000 | 0 -           | +3500 ▲       |
| LDPE 15303              | cpt inc VAT | 154,000-155,000 | 0 -           | +1250 ▲       |
| LDPE 10803              | cpt inc VAT | 144,000-149,500 | -250 ▼        | +4250 ▲       |
| HDPE injection          | cpt inc VAT | 143,000-145,000 | 0 -           | +4000 ▲       |
| HDPE HMW film           | cpt inc VAT | 140,000-145,000 | 0 -           | +3500 ▲       |
| HDPE pipe/BM            | cpt inc VAT | 142,000-151,000 | 0 -           | 0 -           |

Turkey LLDPE film prices

\$/t



### Egypt

Polyethylene (PE) import prices in Egypt rolled over this week. Market participants were away this week for the Eid-al-Fitr holidays, so the market was quiet. The market is expected to pick up with the announcement of May offers.

Middle East-origin HDPE film was assessed at \$1,250-1,275/t cif, Middle East-origin LDPE at \$1,300-1,325/t cif and Middle East-origin LLDPE butene at \$1,150-1,220/t cif.

### Middle East

Gulf Co-operation Council (GCC) polyethylene (PE) prices rolled over this week as market activity was limited because of Eid al-Fitr. Low-density PE (LDPE) film remained at \$1,100-1,130/t del GCC. Linear LDPE (LLDPE) film was stable at \$1,020-1,070/t del GCC. Metallocene LLDPE hexene was stable at \$1,200-1,220/t del GCC. Metallocene LLDPE octene remained at \$1,280-1,300/t del GCC. High-density PE (HDPE) film remained at \$1,020-1,060/t del GCC. HDPE blow moulding was assessed at \$1,040-1,100/t del.

Prices in Jordan and Lebanon were also unchanged because of Eid. LDPE film was stable at \$1,170-1,190/t del Jordan/Lebanon. LLDPE film remained at \$1,110-1,130/t del Jordan/Lebanon. HDPE film rolled over at \$1,130-1,150/t del Jordan/Lebanon.

Qatar's state-owned PE distributor Muntajat on 4 April declared force majeure on LLDPE. Muntajat's supplier, state-owned Qatofin, shut its LLDPE plant in Mesaieed on 30 March. The plant produces up to 600,000 t/yr of LLDPE. Production will likely restart on 26 April.

### China

China's spot prices firmed, following higher linear low-density polyethylene (LLDPE) futures, supported by shorter supplies driven by a heavy turnaround season.

Higher LLDPE futures encouraged both producers and traders to raise their offers accordingly. Domestic LLDPE film prices were at 8,200-8,550 yuan/t, up by Yn50-100/t from the previous range. HDPE film prices also increased slightly to Yn8,200-8,450/t, up by Yn50/t from the previous week. LDPE film prices were at Yn9,150-9,550/t, Yn100/t higher than the previous session.

But overall trading volumes weakened slightly during the week as downstream converters preferred to consume feedstocks on hand. Downstream demand slowed down, especially at agricultural film sector, whose run rates fell from last week's 47pc to 45pc this week for weakening demand. The average operating rates at package film industry was steady at 57pc.

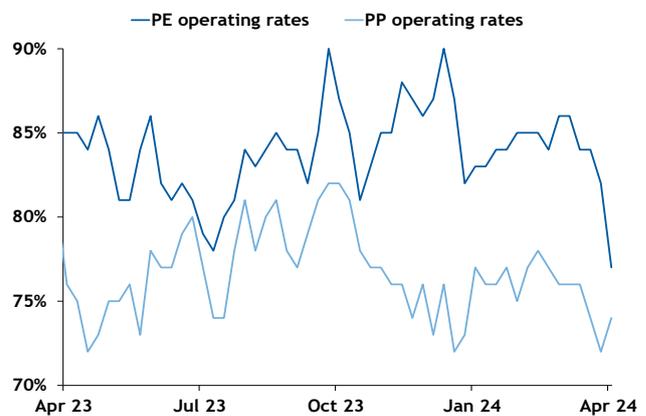
PP and polyethylene inventories at major Chinese producers increased to 845,000t on 11 April after a three-day

| China domestic  |          |             |               | Yn/t          |
|-----------------|----------|-------------|---------------|---------------|
|                 | Basis    | Price       | 1 week change | 4 week change |
| LDPE liner film | ex-works | 9,150-9,550 | +100 ▲        | +50 ▲         |
| LLDPE butene    | ex-works | 8,200-8,550 | +75 ▲         | +100 ▲        |
| HDPE HMW film   | ex-works | 8,200-8,450 | +50 ▲         | +75 ▲         |

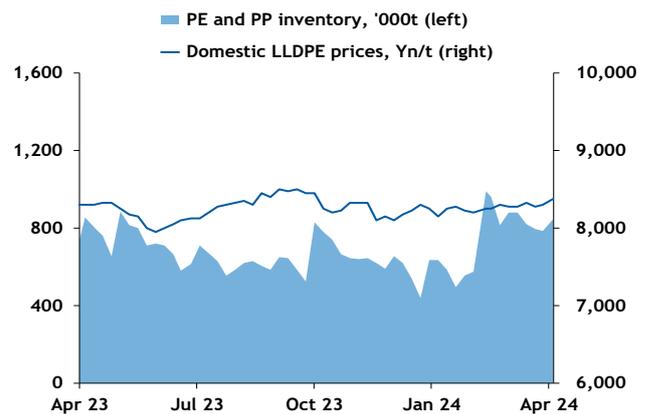
### Market highlight

■ PP and polyethylene inventories at major Chinese producers increased to 845,000t on 11 April after a three-day holiday amid slow consumption rate, up by 60,000t from 3 April.

China PE, PP plant operating rates



Sinopec and PetroChina inventory vs LLDPE prices



holiday amid slow consumption rate, up by 60,000t from 3 April.

Domestic supply tightened as average PE operating rates fell to 77pc this week, down by five percentage points

compared with previous week. A total of 5.28mn t/yr of PE production capacities were commencing maintenance this week. Lianyungang Petrochemical shut a 400,000 t/yr HDPE plant on 20 March and another 400,000 t/yr unit was done on 3 April, alongside with upstream cracker turnaround. Zhejiang Petrochemical shut its 350,000 t/yr HDPE unit on 25 March and 450,000t/t LLDPE/HDPE unit on 8 April for one-month maintenance. Shenhua also delayed its planned 40-day maintenance at 400,000t/yr LLDPE/ HDPE unit to mid-April from the original plan in early April.

Import prices for April-loading cargoes also edged higher with upward trend of domestic PE prices. A Saudi producer quoted LLDPE at \$960/t cif China, HDPE film at \$990/t cif China, and LDPE was at \$1,060/t cif China. Notional buying ideas were \$10/t lower than the given prices without deals concluded. Saudi-origin LLDPE was traded at \$950-960/t cif China while LDPE was at \$1,050/t cif China. US-origin LLDPE was transacted at \$940/t cif China.

The weekly assessment for LLDPE film was at \$940-960/t cfr China, \$3/t higher from the previous assessment. HDPE film was assessed unchanged at \$950-990/t cfr China. LDPE film was assessed at \$1,030-1,050/t cfr China, up by \$8/t week-on-week.

The cfr China metallocene prices also corrected upwards slightly, supported by higher PE prices in China. Mainstream spot duty-free metallocene LLDPE was traded at \$1,120-1,195/t cfr China, and dutiable cargoes were transacted at \$1,050-1,110/t cfr China, both of them were \$10/t higher than the low end of previous week. But the buying interest remained limited with tepid downstream demand.

China's domestic ethylene vinyl acetate (EVA) market remained soft this week. Downstream demand for foaming grade was lukewarm while photovoltaic (PV) demand firmed.

Spot prices for foaming grade stayed at Yn10,600-11,500/t, inched down by Yn50/t from last week amid continued sluggish demand. Domestic ex-works offers for PV grade remained flat at Yn12,200-13,000/t.

The production margins for EVA producers declined to Yn1,924/t this week, down by Yn82/t from last week because of softer foaming grade prices.

Domestic EVA producers were running at operating rates of 83pc, two percentage points lower than the last session.

Zhongke Refinery & Petrochemical shut down its 100,000 t/yr EVA plant located in Guangdong of south China for around two months since 24 March. Formosa Ningbo plans to shut down its 100,000 t/yr EVA unit from 15 April for one month.

In additional, Zhejiang Petrochemical has shut down its 300,000 t/yr EVA plant earlier this week on 8 April for 30 days of maintenance.

South Korea's Hanwha Total offered at \$1,500/t cfr north-east Asia for PV grade EVA, flat from the previous session. Spot foaming grades traded at \$1,250-1,300/t cfr northeast Asia, decreased slightly by \$25/t from last week. PV grades were stable at \$1,400-1,450/t cfr northeast Asia.

The export market was still quiet this week with offers placed at \$1,300-1,350/t fob China, inched down by \$25/t from the last session.

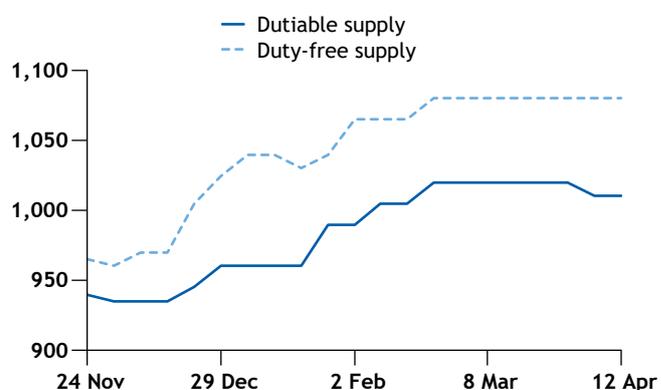
### Southeast Asia and Vietnam

Southeast Asia PE prices remained stable amid thin trading activities. Spot offers were limited in mid-month as the Middle Eastern producers were away for the Eid al-Fitr holidays. Qatar's Muntajat announced force majeure on its LLDPE supply on 4 April following a plant shutdown by its supplier, state-owned Qatofin's 600,000 t/yr LLDPE plant. The shutdown is expected to last for around 28 days. Muntajat is a key PE supplier, exporting its products Asia-Pacific and Europe. April orders for Muntajat's LLDPE supplies to southeast Asian buyers were mostly cancelled following the announcement, although this has left limited impacts to LLDPE prices in the region. But any prolonged shutdown of Qatofin's LLDPE plant could result in shortages in Asia-Pacific, said market participants.

While regional converters acknowledged that PE supplies are tightening because of a heavy schedule of maintenance shutdowns, converters have raised their concerns on persistently weak downstream demand. Converters had perceived that weaker downstream demand through April could balance tighter supplies and prices are likely to keep stable or inch lower, while producers were raising offers to protect their margins. Buyers had refrained from replenishing their inventories at current high prices and continued to source domestic PE supplies when necessary. Weakening

SE Asia LLDPE film prices

\$/t



| Global polymer freight rates        |                    |           |            |   | \$/t              |
|-------------------------------------|--------------------|-----------|------------|---|-------------------|
| Origin                              | Destination        | Argus Low | Argus High | ± | Source            |
| <b>Americas</b>                     |                    |           |            |   |                   |
| Houston                             | Shanghai           | 14        | 26         | ▲ | Freightos Derived |
| Houston                             | Mersin             | 26        | 44         | ▼ | Freightos Derived |
| Houston                             | Genoa              | 24        | 29         | - | Freightos Derived |
| Houston                             | Valencia           | 29        | 33         | ▲ | Freightos Derived |
| Houston                             | Antwerp            | 22        | 25         | ▲ | Freightos Derived |
| Houston                             | Santos             | 36        | 51         | ▲ | Freightos Derived |
| Houston                             | Buenos Aires       | 38        | 50         | ▼ | Freightos Derived |
| Houston                             | Buenaventura       | 65        | 66         | ▲ | Freightos Derived |
| Houston                             | Callao             | 64        | 65         | ▲ | Freightos Derived |
| Houston                             | Guayaquil          | 65        | 69         | ▲ | Freightos Derived |
| Houston                             | Valparaiso         | 65        | 89         | ▲ | Freightos Derived |
| Santos                              | Rotterdam          | 20        | 30         | - | Freightos Derived |
| <b>Middle East and North Africa</b> |                    |           |            |   |                   |
| Jubail                              | China              | 10        | 15         | ▲ | Argus             |
| Jubail                              | Indonesia          | 26        | 31         | ▲ | Argus             |
| Jubail                              | Karachi            | 34        | 39         | ▲ | Argus             |
| Jubail                              | Mumbai             | 26        | 31         | ▲ | Argus             |
| Jubail                              | Turkey             | 162       | 167        | ▲ | Argus             |
| Jebel Ali                           | Shanghai           | 8         | 12         | ▲ | Freightos Derived |
| Jebel Ali                           | Singapore          | 10        | 13         | ▲ | Freightos Derived |
| Jebel Ali                           | Melbourne          | 75        | 85         | - | Freightos Derived |
| Jebel Ali                           | Tauranga           | 80        | 90         | - | Freightos Derived |
| Jebel Ali                           | Antwerp            | 90        | 110        | ▲ | Freightos Derived |
| Jebel Ali                           | Buenaventura       | 142       | 162        | - | Freightos Derived |
| Jebel Ali                           | Callao             | 139       | 159        | - | Freightos Derived |
| Port Said                           | Mersin             | 20        | 30         | - | Freightos Derived |
| Port Said                           | La Spezia          | 25        | 35         | - | Freightos Derived |
| Port Said                           | Antwerp            | 25        | 35         | - | Freightos Derived |
| <b>Southeast Asia</b>               |                    |           |            |   |                   |
| Singapore                           | Karachi            | 46        | 54         | - | Freightos Derived |
| Singapore                           | Mumbai Nhava Sheva | 45        | 49         | - | Freightos Derived |
| Singapore                           | Colombo            | 40        | 46         | - | Freightos Derived |
| Singapore                           | Melbourne          | 51        | 64         | ▲ | Freightos Derived |
| Singapore                           | Tauranga           | 60        | 70         | ▲ | Freightos Derived |
| Vung Tau                            | Antwerp            | 130       | 142        | ▼ | Freightos Derived |
| Vung Tau                            | Genoa              | 161       | 178        | - | Freightos Derived |

| Global polymer freight rates |                    |           |            |   | \$/t              |
|------------------------------|--------------------|-----------|------------|---|-------------------|
| Origin                       | Destination        | Argus Low | Argus High | ± | Source            |
| <b>Northeast Asia</b>        |                    |           |            |   |                   |
| Busan                        | Mersin             | 165       | 185        | ▲ | Freightos Derived |
| Busan                        | Koper              | 184       | 197        | ▲ | Freightos Derived |
| Busan                        | Genoa              | 149       | 167        | ▲ | Freightos Derived |
| Busan                        | Valencia           | 158       | 169        | ▲ | Freightos Derived |
| Busan                        | Antwerp            | 128       | 140        | ▲ | Freightos Derived |
| Busan                        | Durban             | 90        | 120        | - | Freightos Derived |
| Busan                        | Santos             | 115       | 130        | ▲ | Freightos Derived |
| Busan                        | Buenaventura       | 110       | 140        | ▲ | Freightos Derived |
| Busan                        | Callao             | 105       | 140        | ▲ | Freightos Derived |
| Busan                        | Melbourne          | 62        | 74         | ▼ | Freightos Derived |
| Busan                        | Tauranga           | 60        | 70         | ▼ | Freightos Derived |
| Shanghai                     | Nagoya             | 30        | 35         | ▲ | Freightos Derived |
| Shanghai                     | Laem Chabang       | 27        | 30         | ▲ | Freightos Derived |
| Shanghai                     | Port Klang         | 15        | 23         | ▲ | Freightos Derived |
| Shanghai                     | Karachi            | 45        | 60         | ▼ | Freightos Derived |
| Shanghai                     | Mumbai Nhava Sheva | 42        | 60         | ▼ | Freightos Derived |
| Shanghai                     | Chennai            | 39        | 52         | ▼ | Freightos Derived |
| Shanghai                     | Colombo            | 39        | 52         | ▼ | Freightos Derived |
| Shanghai                     | Chittagong         | 50        | 70         | - | Freightos Derived |
| Shanghai                     | Mersin             | 168       | 188        | ▲ | Freightos Derived |
| Shanghai                     | Koper              | 167       | 188        | ▲ | Freightos Derived |
| Shanghai                     | Genoa              | 155       | 176        | ▲ | Freightos Derived |
| Shanghai                     | Valencia           | 156       | 185        | ▲ | Freightos Derived |
| Shanghai                     | Antwerp            | 126       | 150        | - | Freightos Derived |
| Shanghai                     | Rotterdam          | 123       | 148        | ▼ | Freightos Derived |
| Shanghai                     | Durban             | 90        | 121        | - | Freightos Derived |
| Shanghai                     | Santos             | 116       | 130        | ▲ | Freightos Derived |
| Shanghai                     | Los Angeles        | 105       | 130        | ▼ | Freightos Derived |
| Shanghai                     | Manzanillo         | 108       | 139        | ▲ | Freightos Derived |
| Shanghai                     | Buenaventura       | 112       | 142        | ▲ | Freightos Derived |
| Shanghai                     | Callao             | 109       | 142        | ▲ | Freightos Derived |
| Shanghai                     | San Antonio, Chile | 115       | 133        | ▲ | Freightos Derived |

 Argus freight rates are as of the day of publication. Rates derived from Freightos data are of the previous day. Selected polymer spot freight rates are calculated by Argus methodology, based on underlying data from the online freight marketplace, Freightos. Visit [www.freightos.com](http://www.freightos.com) for complete lists of \$/FEU rates in the wider spot container market.

local currencies, Thai baht and Vietnamese dong against the US dollars further limited import discussions this week.

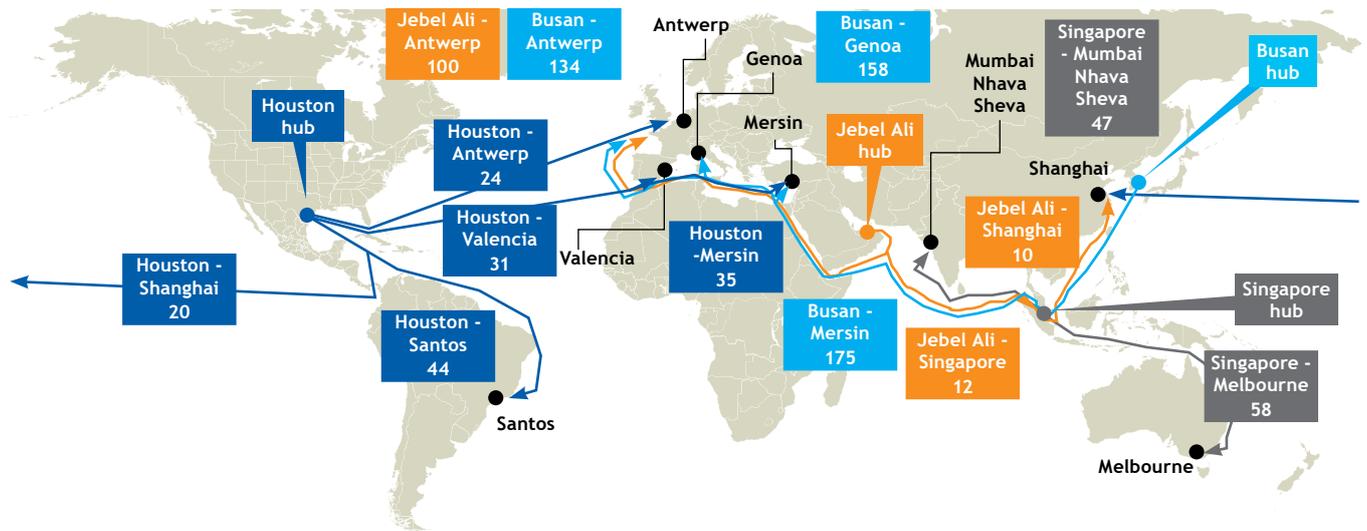
The key Indonesian market is closed from 8 - 15 April for the Eid al-Fitr holidays. Indonesian distributors held high PE stocks because of heavy restocking prior to the withdrawal of a mandatory import mandate in early March. More PE imports are expected to arrive in Indonesia next week after a one to two-week road and ports closures for Eid celebrations. Domestic PE prices in Indonesia could drop further from next week because of high inventories and weaker downstream demand post Eid holidays, participants anticipated. Thai producers and converters will be away from

13-17 April for Thai New Year holidays, likely to further limit spot discussions next week.

Vietnam's Long Son Petrochemical's 500,000 t/yr LLDPE unit and 500,000 t/yr HDPE unit had remained shut. The producer extended the shutdown of its cracker and downstream PE units to June to address technical issues, following a force majeure announcement on 22 February. Malaysia's PRefChem shut its 350,000 t/yr LLDPE unit and 400,000 t/yr HDPE unit from late March for a three-week maintenance.

Indonesia's Chandra Asri is expected to shut its entire petrochemical complex for a 45-day major turnaround in May. Malaysia's Lotte Titan will conduct a turnaround

POLYETHYLENE ROUTES BY EXPORTING PORT



maintenance at its PE plants between April and late May, on a rotation basis. Thailand’s PTT is expected to shut its No.1 400,000 t/yr LLDPE unit from the second half of April for a one-month maintenance. Thailand’s SCG has restarted its 800,000 t/yr naphtha cracker in late March a shutdown since mid-November last year. The producer is expected to ramp up production at its downstream HDPE plant in April.

Dutiable LDPE film prices were stable at \$1,080-1,100/t cfr southeast Asia, with limited new offers. LLDPE film prices also remained stable at \$1,000-1,020/t cfr southeast Asia. US-origin LLDPE film offers were placed at \$1,020/t cfr southeast Asia, but attracted limited buying interest. HDPE film prices were stable at \$1,010-1,030/t cfr southeast Asia. Dutiable metallocene LLDPE prices were stable at \$1,080-1,100/t cfr southeast Asia. US-origin metallocene LLDPE offers were at \$1,100/t cfr southeast Asia.

Duty-free LDPE film prices were stable at \$1,130-1,150/t cfr southeast Asia. Thai-origin LDPE film offers were placed at \$1,180/t cfr southeast Asia last week but attracted limited buying interest. LLDPE film and HDPE film prices were rolled over at \$1,060-1,100/t and \$1,050-1,090/t respectively cfr southeast Asia. Thai-origin HDPE film offers were placed at \$1,110/t cfr southeast Asia since last week, with deals possibly done for limited volumes. Duty-free HDPE blow molding prices were assessed at \$1,080-1,100/t cfr southeast Asia. Singapore and Thai-origin HDPE blow molding offers were placed at \$1,110/t cfr southeast Asia since last week. Duty-free metallocene LLDPE prices were stable at \$1,200-1,220/t cfr southeast Asia. Singapore-origin metallocene LLDPE offers were at \$1,240/t cfr southeast Asia.

Spot PE transactions settled lower in Vietnam this week, further weakening market sentiment. LLDPE film prices fell to \$980-1,000/t cfr Vietnam. A key Saudi producer offered

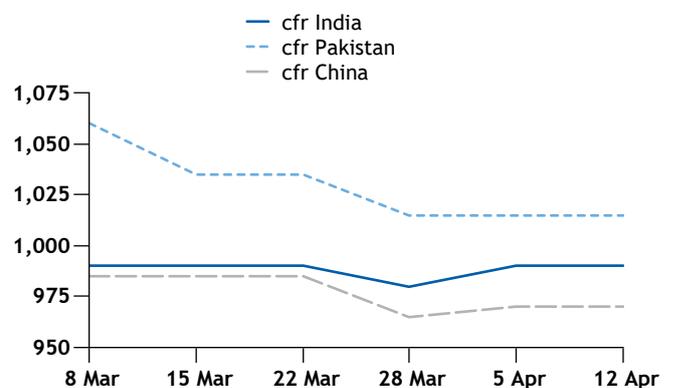
LLDPE supplies at \$990-1,000/t cfr Vietnam last week and deals were also likely done at \$980/t cfr Vietnam for a minimum offtake of 500t. Other Middle East-origin LLDPE film offers were placed at \$1,000-1,010/t cfr Vietnam, with deals done at the same price. HDPE film prices fell to \$980-1,010/t cfr Vietnam. South Korean and Middle Eastern-origin HDPE film offers were placed at \$990-1,000/t cfr Vietnam. HDPE blow molding prices were assessed at \$970-990/t cfr Vietnam. More HDPE blow molding supplies are expected to rise in Vietnam later this month, following the arrival of deep-sea US-origin blow molding supplies, which settled at lower prices of \$920-930/t cfr Vietnam between December 2023 and January this year.

South Asia

Indian PE prices were stable this week as market activity was limited. Offers from the Middle East were scarce be-

South Asia vs China HDPE prices

\$/t



cause of Eid al-Fitr. Most Indian buyers were on the market sidelines as many continued to restock from domestic markets where Indian producers have excess cargoes on hand. Indian buyers were waiting for the announcement of new offers for May shipments.

LDPE film was stable at \$1,130-1,150/t cfr India. LLDPE film remained at \$940-960/t cfr India. Metallocene LLDPE hexene was stable at \$1,150-1,180/t cfr. Offers have been limited in recent weeks. HDPE film was stable at \$980-1,000/t cfr India. HDPE blow moulding was assessed at \$1,000-1,020/t cfr India. HDPE PE100 natural remained at \$1,010-1,030/t cfr India. HDPE PE100 black was stable at \$1,040-1,060/t cfr India.

Indian producers raised LDPE prices by 1,000 rupees/t across all grades except for LDPE heavy duty which was raised by Rs3,000/t and LDPE extrusion coating, which was raised by Rs5,000/t. LLDPE and HDPE prices were cut by Rs3,000/t and Rs2,000/t respectively.

Domestic producers have stopped bulk discounts that were previously given in March to boost profit margins as they have been thin. Demand for imports has been weak in March. Most Indian buyers only restocked as needed and prioritised domestic cargoes over imported cargoes. Indian producers were optimistic that more restocking will take place this month as inventory levels at most converters are low. But the removal of bulk discounts could see Indian buyers change their priorities and return to import markets in May. The removal of bulk discounts could put domestic prices on par with import prices.

Domestic LLDPE prices could continue to stay suppressed as producers' inventories remain high. The new startup at HMEL in Bathinda last year has seen an influx of supplies in the market. The producer has been under pressure to maximise operating rates, resulting in increased supplies. HMEL started two LLDPE/HDPE swing plants capable of producing 400,000 t/yr each, totalling 800,000 t/yr of LLDPE/HDPE swing production.

It has been difficult for most Indian producers to pivot to exports to alleviate this inventory pressure as they do not have the logistical infrastructures to support this. Some producers choose to continue focusing on domestic markets as netbacks are usually higher. These producers would rather bear with the thin margins seen currently as they are confident that prices will firm at the start of the new fiscal year that began this month.

Other producers have had to resort to reducing operating rates to minimise losses because of weak margins. Producers that were hit hardest were naphtha-based producers as naphtha prices have been firm, making it hard for these producers to stay profitable with current weak PE prices.

Dual-feed producers and gas-based producers, along with integrated producers, were not affected as badly.

State-controlled OPAL had to shut one of its LLDPE/HDPE swing lines in Dahej, Gujarat because of rising inventory pressure and weakening margins. Around 180,000 t/yr was taken offline. It is unclear when the producer will resume production at this line.

State-controlled Gail has shut down its entire petrochemical complex this month for a turnaround. Gail operates two LLDPE/HDPE swing plants with capacities of 210,000 t/yr and 400,000 t/yr, along with two 120,000 t/yr HDPE plants and another 250,000 t/yr HDPE plant. Gail also has two crackers. Each cracker can produce 450,000 t/yr of ethylene.

Pakistani PE prices were stable as market activity was limited because of Eid al-Fitr. LDPE film remained at \$1,110-1,140/t cfr Pakistan. LLDPE film held at \$990-1,010/t cfr Pakistan. HDPE film was unchanged at \$1,000-1,030/t cfr Pakistan.

Bangladeshi PE was also unchanged because of Eid al-Fitr. LDPE film was stable at \$1,140-1,160/t cfr Bangladesh. LLDPE film remained at \$1,020-1,040/t cfr Bangladesh. HDPE film rolled over at \$1,040-1,060/t cfr Bangladesh.

Sri Lanka's PE prices were stable with spot offers staying limited. LDPE film held at \$1,150-1,170/t cfr Sri Lanka. LLDPE film remained at \$1,030-1,050/t cfr Sri Lanka. HDPE film remained at \$1,080-1,100/t cfr Sri Lanka.

Nepal's PE prices were unchanged as spot offers stayed limited. LDPE film held at \$1,200-1,230/t cpt Nepal. LLDPE film was stable at \$1,020-1,050/t cpt Nepal. HDPE film remained at \$1,130-1,150/t cpt Nepal.

## FUNDAMENTALS

### Global production news

#### Qatar's Muntajat declares force majeure on LLDPE

Qatar's state-owned marketer Muntajat has on 4 April declared force majeure on its linear low-density polyethylene (LLDPE) supply. The force majeure will remain in place until further notice, according to a letter its customers, which cannot be verified independently.

Muntajat's supplier, state-owned Qatofin, shut its LLDPE plant in Mesaieed on 30 March and is hence not able to supply LLDPE to Muntajat's customers for the time being. The plant produces up to 600,000 t/yr of LLDPE and is expected to be restarted on 26 April.

Qatofin shut its LLDPE plant because of a trip at Ras Laffan Olefins' 1.3mn t/yr ethylene cracker earlier on 30 March, which has restricted feedstock ethylene supplies.

| Plant maintenance, outages and disruptions |                           |             |            |                   |   |  |          |
|--|---------------------------|-------------|------------|-------------------|---|--|----------|
| Status                                     | Plant                     | Location    | Grade      | Capacity '000t/yr | Duration                                      | Remarks  | Source   |
|  | Orlen Unipetrol PE No.3   | Europe      | HDPE       | 270               | 26 Sep 2023 until present                     | Force majeure announced after a power supply interruption on 21 September    | Industry |
|  | Versalis Brindisi         | Europe      | LLDPE/HDPE | 420               | 13 Nov 2023 until present                     | Plant shut after a fire incident at the site's ethylene purification section | Producer |
|  | MOL Tiszaujvaros          | Europe      | HDPE       | 420               | 25 Jan until present                          | Force majeure announced after cracker outage                                 | Industry |
|  | MOL Tiszaujvaros          | Europe      | LDPE       | 65                | 25 Jan until present                          | Force majeure announced after cracker outage                                 | Industry |
|  | Slovnaft Bratislava       | Europe      | LDPE       | 220               | Early Feb until present                       | Force majeure announced  | Industry |
|  | TotalEnergies Gonfreville | Europe      | LLDPE/HDPE | 200               | 16 Feb until present                          | Force majeure announced on HDPE supplies                                     | Industry |
|  | Orlen Unipetrol           | Europe      | HDPE       | 470               | 4 Apr - 7 May                                 | Planned maintenance  | Producer |
|  | Kazanorgsintez            | Russia      | HDPE       | 510               | 1 Apr 2023 until end of the year              | Modernization, unit B  | Producer |
|  | Gazprom Neftekhim Salavat | Russia      | LDPE       | 46                | 22 Jul 2023 for 30 - 40 days                  | Planned maintenance  | Producer |
|  | Gazprom Neftekhim Salavat | Russia      | HDPE       | 120               | 22 Jul 2023 for 30 - 40 days                  | Planned maintenance  | Producer |
|  | Ufaorgsintez              | Russia      | LDPE       | 90                | Mid-Sep 2023 for 14 days                      | Planned maintenance  | Producer |
|  | Stavrolen                 | Russia      | HDPE       | 300               | 11 Sep 2023 for 45 days                       | Planned maintenance  | Producer |
|  | Kazanorgsintez            | Russia      | HDPE       | 510               | 18 Sep - 10 Oct 2023                          | Planned maintenance  | Producer |
|  | Kazanorgsintez            | Russia      | LDPE       | 232               | 18 Sep - 10 Oct 2023                          | Planned maintenance  | Producer |
|  | Zapsibneftekhim           | Russia      | LLDPE/HDPE | 1500              | 14 - 25 Jul, 15 - 26 Aug, Dec 2023 for 5 days | Planned maintenance  | Producer |
|  | Polimir                   | Belarus     | LDPE       | Uncertain         | 1 - 30 Sep 2023                               | Planned maintenance  | Producer |
| NEW  | Qatofin                   | Qatar       | LLDPE      | 600               | Mar   | Force majeure  | Industry |
|  | Gail                      | India       | HDPE       | 120               | Apr for one month                             | Planned maintenance  | Industry |
|  | Gail                      | India       | HDPE       | 120               | Apr for one month                             | Planned maintenance  | Industry |
|  | Gail                      | India       | HDPE       | 250               | Apr for one month                             | Planned maintenance  | Industry |
|  | Gail                      | India       | LLDPE/HDPE | 210               | Apr for one month                             | Planned maintenance  | Industry |
|  | Gail                      | India       | LLDPE/HDPE | 400               | Apr for one month                             | Planned maintenance  | Industry |
| NEW  | OPAL                      | India       | LLDPE/HDPE | 160               | Mar   | Unplanned shutdown   | Industry |
|  | Haiguo Longyou            | China       | LLDPE/HDPE | 400               | Early Apr 2022 - 2024                         | Maintenance  | Producer |
|  | Sinopec Qilu              | China       | PE         | 650               | 23 Dec 2023 - Feb                             | Explosion  | Producer |
|  | Sinopec SK Wuhan Phase 2  | China       | HDPE       | 300               | 16 Jan - early Apr                            | Maintenance extended   | Producer |
|  | Wanhua Petrochemical      | China       | HDPE       | 350               | 1 Feb - Apr                                   | Maintenance  | Producer |
|  | Zhongke refinery          | China       | HDPE       | 350               | 20 Mar for two months                         | Maintenance  | Producer |
|  | Lianyungang Petrochemical | China       | HDPE       | 400               | 20 Mar for 45 - 60 days                       | Maintenance  | Producer |
| UPDATE                                     | Lianyungang Petrochemical | China       | HDPE       | 400               | 3 Apr - end May                               | Maintenance delayed  | Producer |
|  | Sinopec Maoming           | China       | LLDPE/HDPE | 220               | 22 Mar until present                          | Maintenance  | Producer |
|  | Zhejiang Petrochemical    | China       | HDPE       | 350               | 25 Mar for one month                          | Maintenance  | Producer |
|  | Hainan Refinery           | China       | HDPE       | 300               | 25 Mar - 25 Apr                               | Maintenance  | Producer |
| UPDATE                                     | Shenhua Baotou            | China       | LLDPE/HDPE | 400               | 15 Apr for 40 days                            | Maintenance delayed  | Producer |
| UPDATE                                     | Sinopec Maoming           | China       | LDPE       | 110               | 7 Apr - end Apr                               | Maintenance  | Producer |
|  | Zhejiang Petrochemical    | China       | LLDPE/HDPE | 450               | 8 Apr - 8 May                                 | Maintenance  | Producer |
|  | Pucheng Clean Energy      | China       | LLDPE/HDPE | 300               | 10 - 25 Apr                                   | Maintenance  | Producer |
|  | Sinopec SK Wuhan No.1     | China       | HDPE       | 300               | 11 - 26 Apr                                   | Maintenance  | Producer |
|  | Shanghai Secco            | China       | HDPE       | 300               | 12 - 22 Apr                                   | Maintenance  | Producer |
| NEW  | PetroChina Guangdong      | China       | HDPE       | 400               | 15 - 22 Apr                                   | Maintenance  | Producer |
|  | Zhongan United            | China       | LLDPE      | 350               | 6 - 21 May                                    | Maintenance  | Producer |
|  | Wanhua Petrochemical      | China       | LLDPE/HDPE | 450               | 7 May - early Jun                             | Maintenance  | Producer |
|  | Sinopec SK Wuhan No.2     | China       | HDPE       | 300               | 8 - 19 May                                    | Maintenance  | Producer |
|  | PetroChina Dushanzi No.1  | China       | LLDPE/HDPE | 230               | 15 May - early Jul                            | Maintenance  | Producer |
|  | PetroChina Dushanzi No.2  | China       | LLDPE/HDPE | 600               | 15 May - early Jul                            | Maintenance  | Producer |
|  | PetroChina Dushanzi       | China       | HDPE       | 300               | 15 May - early Jul                            | Maintenance  | Producer |
| NEW  | Zhongtian Hechuang        | China       | LDPE       | 370               | Mid-Jun - end Jul                             | Maintenance  | Producer |
| NEW  | Zhongtian Hechuang        | China       | LLDPE/HDPE | 300               | Mid-Jun - end Jul                             | Maintenance  | Producer |
|  | JG Summit Petrochemical   | Philippines | LLDPE      | 160               | Jan until present                             | Plant restarted and operating at around 85pc                                 | Producer |
|  | JG Summit Petrochemical   | Philippines | HDPE       | 160               | Jan until present                             | Plant restarted and operating at around 85pc                                 | Producer |
|  | Lotte Titan Nusantara     | Indonesia   | HDPE       | 125               | Jan until present                             | Plant is operating at 80pc   | Producer |
|  | Lotte Titan Nusantara     | Indonesia   | HDPE       | 125               | Jan until present                             | Plant is operating at 80pc   | Producer |
|  | Lotte Titan Nusantara     | Indonesia   | LLDPE      | 200               | Jan until present                             | Plant is operating at 80pc   | Producer |
|  | Thai Polyethylene         | Thailand    | HDPE       | 920               | Nov 2023 - Mar                                | Plant is operating at reduced rates alongside upstream cracker shutdown      | Industry |
|  | Petronas Chemicals        | Malaysia    | LDPE       | 255               | 21 Jan - 20 Feb                               | Maintenance, plant restarted   | Industry |
|  | Lotte Chemical Titan      | Malaysia    | HDPE       | 115               | End Feb for 11 days                           | Maintenance  | Industry |
|  | Lotte Chemical Titan      | Malaysia    | HDPE       | 220               | End Mar for one week                          | Maintenance  | Industry |
|  | Lotte Chemical Titan      | Malaysia    | LDPE       | 230               | End Apr for 40 days, early May for 20 days    | Maintenance  | Industry |
|  | PTT Global Chemical No.1  | Thailand    | LLDPE      | 400               | 2H Apr for one month                          | Maintenance  | Industry |
|  | Chandra Asri              | Indonesia   | LLDPE/HDPE | 400               | May for 45 days                               | Maintenance  | Producer |
|  | Chandra Asri              | Indonesia   | HDPE       | 336               | May for 45 days                               | Maintenance  | Producer |

Qatofin is a joint venture between QAPCO and TotalEnergies, with both holding stakes of 63pc and 36pc respectively.

Ras Laffan Olefins is a joint venture between Qatofin and Q-Chem II.

| New start-ups |   |             |            |                   |          |                                     |          |
|---------------|---|-------------|------------|-------------------|----------|-------------------------------------|----------|
| Status        | Plant                                   | Location    | Grade      | Capacity '000t/yr | Start-up | Remarks                             | Source   |
|               | Nova Chemicals                          | Canada      | LLDPE      | 500               | Dec 2023 |                                     | Industry |
|               | Shell Polymers                          | US          | HDPE       | 550               | 1Q       |                                     | Industry |
|               | Ningxia Baofeng Phase 3                 | China       | LDPE/EVA   | 250               | Early    |                                     | Producer |
|               | Ineos Sinopec Tianjin                   | China       | HDPE       | 500               | 2024     |                                     | Producer |
|               | Nangang Ineos Sinopec Tianjin           | China       | LLDPE      | 300               | 2024     |                                     | Producer |
|               | Nangang Ineos Sinopec Tianjin           | China       | UHMWPE     | 100               | 2024     |                                     | Producer |
|               | China Coal Yulin                        | China       | HDPE       | 350               | End 2024 |                                     | Producer |
|               | Yulongdao Refining & Petrochemical No.1 | China       | HDPE       | 300               | 2024     |                                     | Producer |
|               | Yulongdao Refining & Petrochemical No.1 | China       | LLDPE/HDPE | 500               | 2024     |                                     | Producer |
|               | Yulongdao Refining & Petrochemical No.1 | China       | UHMWPE     | 100               | 2024     |                                     | Producer |
|               | Shandong Jincheng Petrochemical         | China       | LLDPE      | 250               | End 2024 |                                     | Producer |
|               | Shandong Jincheng Petrochemical         | China       | HDPE       | 450               | End 2024 |                                     | Producer |
|               | JG Summit Petrochemical                 | Philippines | HDPE       | 250               | 2H       | Plant is operating at reduced rates | Industry |
|               | PRefChem                                | Malaysia    | LLDPE/HDPE | 350               | Aug 2022 | Plant has been shut                 | Industry |
|               | PRefChem                                | Malaysia    | HDPE       | 400               | Sep 2022 | Plant has been shut                 | Industry |
|               | Long Son Petrochemical                  | Vietnam     | LLDPE      | 500               | Jun 2024 | Plant shutdown extended to June     | Industry |
|               | Long Son Petrochemical                  | Vietnam     | HDPE       | 500               | Jun 2024 | Plant shutdown extended to June     | Industry |

Ras Laffan Olefins' 1.3mn t/yr cracker also supplies feedstock to Q-Chem II's chemical facility in Mesaieed, which comprises a 350,000 t/yr high-density polyethylene plant and a 345,000 t/yr alpha olefins plant.

#### ExxonMobil to shut France Port Jerome petchem plant

ExxonMobil will close its chemical operation at Port-Jerome-sur-Seine in northern France. It said the site has recorded losses of more than €500mn (\$540mn) since 2018.

The site will close gradually subject to government approvals, with full closure expected in 2024. ExxonMobil said 677 jobs will be lost by 2025.

The site has capacity of 290,000 t/yr for propylene, 400,000 t/yr of ethylene, and up to 80,000 t/yr of butadiene. ExxonMobil said the configuration of the steam cracker, its small size compared with newer units, high operating and energy costs in Europe has made the site uncompetitive.

"We cannot continue to operate at such a loss," said ExxonMobil's France president Charles Amyot.

The attached 236,000 b/d oil refinery is unaffected and will continue to operate. It is scheduled to come back online in May following a fire there earlier in the year. The refinery has a capacity of 70,000 t/yr of refinery grade propylene and 50,000 t/yr of chemical grade propylene.

#### Sabco to begin Geleen cracker closure this week

Saudi state-owned petrochemicals company Sabco will begin work at the end of this week to disconnect and permanently close one of the two steam crackers at its petrochemicals site in Geleen, Netherlands.

The steam cracker to be closed, Geleen 3, cracks naph-

tha/condensate feedstock with a small flexibility to crack propane and butane. The steam cracker has a nameplate ethylene production capacity of 550,000 t/yr and chemical grade propylene capacity of 260,000 t/yr. Five other units will also be shut down at the site during a three-month maintenance period, the company said, although it did not give further details.

Sabco said that the closure is "part of the strategic reorientation of the site based on careful evaluation and market conditions and enables Sabco to prepare the Geleen site for future success in a competitive market".

Sabco operates two steam crackers at Geleen. The other, Geleen 4, has a capacity of 675,000 t/yr of ethylene and 485,000 t/yr of propylene. Both crackers are over 40 years old. Sabco also operates derivative capacities at the site, including 300,000 t/yr of HDPE, 470,000 t/yr of LDPE and 600,000 t/yr of polypropylene. The site also has a 130,000 t/yr butadiene extraction unit.

Sabco is also expected to restart its steam cracker in the future at its Wilton site in Teesside in the UK with the company investing in the site to convert the cracker to 100pc ethane feedstock. The cracker was shut in 2020, when it had a capacity of 786,000 t/yr of ethylene production. This is expected to decrease to 450,000 t/yr capacity when the plant restarts production.

#### Choctaw ethylene near 2-year high to Mont Belvieu

The price of ethylene at the Choctaw, Louisiana, hub is at its highest premium to Mont Belvieu, Texas, since May 2022, as a planned turnaround at a major cracker has yet to be completed.

Choctaw ethylene was assessed as high as a 2¢/lb premium this past week to ethylene at the Enterprise Products Partners (EPC) hub at Mont Belvieu, Texas. Choctaw ethylene traded as high as 21¢/lb on 4 April, the highest recorded trade since mid-October 2023.

Driving prices to six-month highs is a turnaround at Nova Chemical's 880,000 metric tonne (t)/yr mixed-feed merchant cracker in Geismar, Louisiana. Nova's cracker is one of only two merchant ethylene crackers in the US. Shutdowns at merchant crackers, which do not have on-site derivative consumption, tend to have outsized impacts on spot prices.

Nova's cracker began its planned turnaround in mid-January and was expected to return to operations by the end of March. Market sources say that restart has not yet happened, which is causing prices to rise at the Choctaw hub. Choctaw ethylene was assessed at 19.5¢/lb on 2 April and rose by 8pc over the next few days, with an assessment as high as 21.125¢/lb. Choctaw prices had been stable, as market participants had known well in advance of the turnaround. The unexpected delay in ending the turnaround caused prices to increase.

Prices at the EPC hub in Mont Belvieu, Texas, have declined since the beginning of April, adding to Choctaw's premium. EPC ethylene for April delivery traded at 19.5¢/lb on 1 April and fell to 19.25¢/lb in Tuesday trading.

Formosa's 862,000 t/yr mixed-feed cracker in Point Comfort, Texas, has returned to operations after its own planned turnaround that began in February.

### **Borealis to increase renewable feedstocks at Porvoo**

Austria-based chemical company Borealis has invested €4.5mn (\$4.9mn) to upgrade cracker furnaces at its Porvoo site in Finland, allowing increased use of renewable and recyclable raw material in olefins production.

The project will impact three of the 10 cracker furnaces in the olefins unit at the site, allowing 120,000 t/yr of base chemicals to be produced from recyclable and renewable feedstocks. The work is expected to be completed by 2025, the company said, adding that the circular raw materials produced at Porvoo have already secured International Sustainability and Carbon Certification (ISCC).

The Porvoo steam cracker has a capacity of 430,000 t/yr of ethylene and 263,000 t/yr of propylene.

### **US finalizes emission limits for chemical plants**

About 200 petrochemical plants, many located in Louisiana and Texas, will be required to reduce toxic air emissions and install fenceline air monitors under a rule President Joe Biden's administration finalized on 9 April.

The rule will apply to chemical plants that produce syn-

thetic organic chemicals and a variety of polymers and resins. The US Environmental Protection Agency (EPA) expects the regulations will reduce plant emissions of the likely carcinogens ethylene oxide (EtO) and chloroprene by nearly 80pc, protecting nearby communities from having elevated risks of contracting leukemia, lymphoma, breast cancer and liver cancer.

"Once the final rule is fully implemented, no one will again face elevated cancer risks from EtO or chloroprene emissions from the equipment and processes covered by this rule," EPA administrator Michael Regan said.

Petrochemical plants covered by the rule are expected to spend \$522mn on equipment to come into compliance, in addition to an estimated \$194mn/yr in recurring costs. Petrochemical plants will be required to improve flare efficiency, reduce equipment leaks and minimize emissions during startups, shutdowns and malfunctions. Those changes will also avoid nearly 24,000 t/yr of the emissions of other air toxics such as benzene, vinyl chloride and 1,3-butadiene, EPA said.

The final rule will replicate a fenceline air monitoring program – already in place at US refineries – that will create an "action level" for six different pollutants and publicly publish results. Chemical plants will be required to make repairs if the monitors detect annual concentrations of the six chemicals that exceed the action level, EPA said.

"This powerful tool will help ensure that companies act responsibly and actually find and fix leaks at their facilities," Regan said.

Environmentalists say they strongly support the final rule, which they say will reduce the "pollution burden" in communities near facilities where cancer risks are elevated. Industry groups urged EPA to withdraw many parts of the rule. The American Chemistry Council, in formal comments last year, said it had "significant concerns" with the fenceline monitoring program and many other key parts of the rule.

## **Packaging and downstream applications**

### **Invista plans nylon fiber business exit**

Integrated chemical producer Invista said it plans to sell its fiber portfolio.

The company's fiber business includes airbag and industrial fibers, the Cordura fabrics businesses and five manufacturing centers in Seaford, Delaware; Martinsville, Virginia; Kingston, Canada; Gloucester, UK; and Qingpu, China.

"Nylon fibers is a great business, and we believe there are other companies with different focus and capabilities that could create even greater value with those assets," said chief executive Francis Murphy on Tuesday.

If Invista is unable to find a buyer for the nylon business it will continue to operate it, Murphy said.

The Kansas-based company operates across the nylon 6,6 and polypropylene value chains to make intermediates, polymers and fibers for various sectors, particularly automotive applications, electronics, and consumer goods. Butadiene serves as a feedstock of nylon intermediates.

Invista has hired Barclays to lead the nylon business sales process.

### Mexican industrial output growth slows in Feb

Mexico's industrial production grew at a slower rate in February as construction stumbled unexpectedly and mining activity contracted.

Industrial output increased by 1.5pc year-over-year in February in seasonally adjusted terms from a year earlier, after it had increased in January by 1.9pc in the same yearly comparison, Mexico's statistics institute Inegi said on Thursday. February's output contracted by 0.1pc from the previous month.

On an annual basis, the mining segment fell by 4pc in February; the electric power, water and natural gas segment rose by 2.5pc; manufacturing remained unchanged, and oil and gas production declined by 1.4pc.

Utilities-related activities have yet to recover from a significant decline in early 2021, amid economic impacts from Covid-19 and rising disputes over energy sector investment.

Manufacture of oil- and coal-related products accelerated, rising by 17.2pc in February on a seasonally adjusted annual basis after climbing by 11.5pc in January and by 4.2pc in December, Inegi reported. This follows sharp declines in October and November 2023.

Construction, which has been driven by the government's pre-election push to complete major infrastructure projects, has grown for more than a year, and rose by 12pc in February on an annual basis. But month-over-month, it declined by 2.5pc.

Still, construction has been more volatile in recent months, rebounding in January after a mostly sluggish fourth quarter in 2023.

Mexican bank Banorte in a note Thursday said it expects construction to resume a general positive acceleration "in the short term, although we expect the boost from manufacturing in the medium-term to be much more substantial ... especially autos."

With manufacturing, the bank also said to expect distortions from the strength of the Mexican peso – with the US dollar-Mexican peso exchange rate now at a 9-year low. This cheapens imports but also reduces earnings from exports.

Banorte expected industrial production to grow by 0.8pc overall in February from the previous month, with 0.1pc monthly growth in construction; 0.7pc expansion in utilities; 1.2pc growth in manufacturing and a 1.5pc drop in mining.

While mining fell only by 0.8pc month-over-month, February performance in other segments was closer in line with the bank's estimates, with Inegi reporting utilities growing by 0.7pc and manufacturing up by 0.5pc.

Leap Year added a business day to February this year, and in unadjusted terms industrial production grew by 3.3pc annually, well below Banorte's 5.1pc estimate and the 4.1pc estimated by Citibanamex, Citibank's Mexico subsidiary.

### Economic view

Global concerns have been mounting over China's excess industrial capacity. In recent economic meetings with Chinese officials the US Treasury Secretary, Janet Yellen, noted that there are rising concerns over the economic fallout from China's excess manufacturing capacity and exports.

China has set an ambitious economic growth target of 5pc for this year, driven in part by more investment in new high-technology sectors as the economy struggles to overcome a property crisis and weak consumer demand. But economists remain doubtful, and many believe China's growth model needs a major overhaul in order to boost domestic consumption and reduce its traditional heavy reliance on investment.

In the west, the US economy continues to show strong growth in comparison to other major global economies. While many economists expect interest rates to be cut in June, the central bank chief, Jerome Powell, noted there is a need for more debate and data before interest rates are cut.

Powell has said that rates will be cut only when they "have greater confidence that inflation is moving sustainably down" to the Fed's 2pc target. His comments reiterate the latest language the Fed has adopted as it tries to balance the risks of cutting interest rates before inflation is controlled, with the risks of suppressing economic activity more than is needed.

In Europe, despite inflation falling, the European Central Bank (ECB) kept interest rates unchanged at its latest policy meeting. Governing council members have previously cited the need to evaluate fresh wage data, due in May, before making the decision to lower rates.

Since September 2023, the ECB has kept its key interest

rate - known as the main refinancing operations rate - at a record high of 4.5pc.

### US inflation accelerates to 3.5pc pace in March

The US consumer price index (CPI) accelerated to a 3.5pc annual pace in March, a sign the Federal Reserve is likely to hold its target lending rate at a 23-year high for longer in order to slow inflation to its long-range goal.

The CPI rose from a 3.2pc rate in February and was the highest since it reached 3.7pc in September, the Bureau of Labor Statistics reported on Wednesday. So called core CPI, which strips out food and energy, rose at a 3.8pc rate, unchanged from the prior month. Food rose at a 2.2pc rate and energy rose at a 2.1pc pace. Shelter rose at a 5.7pc annual rate.

The CPI report reduced the probability that the US Federal Reserve will begin cutting its target rate at its June meeting to less than 20pc, futures markets showed on Wednesday, down from a greater than 57pc probability on Tuesday. The Fed last week signaled it was in no hurry to begin cutting borrowing costs amid stronger than expected economic data, even as it also suggested most members did expect cuts to begin later this year.

On a monthly basis, CPI rose by 0.4pc for a second month and core CPI rose by 0.4pc for a third month. Food rose by 0.1pc on the month and energy rose by 1.1pc, with gasoline up 1.7pc. The shelter index and gasoline index accounted for 50pc of the monthly gain in the headline CPI index, the bureau said.

### ECB keeps interest rates unchanged

The European Central Bank (ECB) left its key lending rate unchanged on Thursday at a record 4pc.

The bank said inflation has continued to fall – to 2.4pc in March from 2.6pc in February – led by lower food price rises, and said its governing council is determined to ensure that inflation returns to its 2pc medium-term target "in a timely manner". It considers its key interest rates are at levels that are "making a substantial contribution to the ongoing disinflation process".

The bank said most measures of inflation are easing, and its past interest rate increases continue to weigh on demand, helping to reduce inflation. But it said domestic price pressures are "strong" and are keeping services price inflation high – at 4pc in March. The Bank of England also commented on persistent services price inflation last month when it maintained its interest rates at the same level.

The ECB's inflation projections are 2.3pc for 2024, and 2pc in 2025. The bank's gross domestic product (GDP) economic growth projection for 2024 is just 0.6pc.

### IMF to upgrade global economic growth forecast

The IMF will slightly upgrade its forecast of the prospects for global growth when it releases its World Economic Outlook report next week, the organization's managing director Kristalina Georgieva said on 11 April.

The quarterly report will project that "global growth is marginally stronger on account of robust activity in the US and in many emerging markets economies," Georgieva said in a curtain raiser speech at Washington-based think tank the Atlantic Council.

The previous outlook from the IMF forecast global growth of 3.1pc in 2024 and 3.2pc in 2025. The world economy grew by an estimated 3.1pc in 2023. IMF projections are used by many economists, including at the IEA, to model oil demand projections.

With a slightly better outlook for the global economy than last year, "it is tempting to breathe a sigh of relief," Georgieva said. "But there are still plenty of things to worry about."

The IMF has been warning of growth risks from what it termed "geo-fragmentation" – the division of once-global markets for commodities and other products based on the political affiliation. Since Russia's invasion of Ukraine, trade growth between the economies in politically distant blocks has been 2.4 percentage points slower than between politically aligned countries, she said.

The IMF is also calling on its members to step up energy transition efforts, as a way to boost growth. Globally, spending on renewable energy technologies already outstrips investment on fossil fuel by 1.7:1 ratio, she said. That ratio was equal five years ago.

### Supply chain and shipping

Shipping association BIMCO forecasts that cargo volumes are expected to grow more slowly than fleet in both 2024 and 2025. But, the ship supply/demand balance is still expected to strengthen in 2024 as Houthi attacks on ships in the Red Sea drive ships to take longer routes via the Cape of Good Hope.

BIMCO expects the Red Sea reroute will impact the market during the first half of 2024, with routings returning to normal via the Suez Canal after that.

As this temporary increase in demand for ships is not related to cargo volume growth, it follows that ship demand will fall in 2025. The tightening of the supply/demand balance in recent months has led to an increase in freight rates, time charter rates and time charter fixture periods.

In the second half of 2024, the Red Sea reroute is expected to be resolved and ships will slow down in the second half of the year to end with similar average sailing speed as in 2023, according to BIMCO.

### Houthis claim operation in the Indian Ocean

Yemen's Houthi militants claimed to have carried out a targeting operation on a container ship in the Indian Ocean – the first time the group has targeted a vessel beyond the Red Sea and Gulf of Aden since it began its attacks on commercial shipping in November.

The Houthis targeted the MSC Grace F in the Indian Ocean as well as the MSC Gina in the Arabian Sea, the group's spokesman said. He referred to the two container vessels owned by MSC as "Israeli ships" and said they were "heading to ports in occupied Palestine". "The operation was carried out with a number of ballistic and winged missiles, achieving its objectives successfully," he said.

The Houthis announced their intention to expand their targeting of Israel-affiliated shipping into the Indian Ocean on 15 March. The vessel allegedly targeted in the Indian Ocean was operating between Mombasa and Mogadishu, according to security firm Ambrey.

Contrary to the Houthi statement, neither vessel was headed to Israel, but the Houthis have used similar language before when targeting the same company because of the company's trade with Israel and co-operation with Israel-affiliated companies, Ambrey added.

The group also said it targeted the "British ship" Hope Island with "a number of suitable naval missiles and the hit was direct", as well as "a number of American military frigates in the Red Sea, using a number of drones".

US Central Command confirmed an anti-ship ballistic missile was launched from a Houthi-controlled area of Yemen towards the Gulf of Aden where a coalition ship was escorting Hope Island, which is Marshall Islands-flagged, UK owned, and Italian operated. There were no injuries or damage reported by US, coalition, or commercial ships, it said.

The Houthis spokesman said the group will persist with its "military operations, enforcing a blockade on Israeli navigation in the Red and Arabian Seas and the Indian Ocean until a ceasefire is achieved and the siege is lifted in Gaza".

### US rail volume rises on commodities traffic

Most US rail freight volume, excluding coal, rose in March amid signs of a pickup in the manufacturing sector.

Total US rail volume rose in March to 1.9mn units, up by 4.2pc from the year-earlier month, Association of American Railroads (AAR) data show.

"Large swaths of rail traffic reflect broader economic changes," AAR chief economist Rand Ghayad said.

He cited the Institute for Supply Management (ISM's) manufacturing purchasing managers' index (PMI) survey's shift into expansion territory in March, saying it "aligns with rail carloads, excluding coal, showing a healthy 2.9pc growth."

He pointed particularly to chemicals traffic, which rose by 5.7pc from March 2023, as well as petroleum products, up by 15pc; and motor vehicles, up by 6.3pc.

Economic activity in the US manufacturing sector grew last month for the first time in more than a year, reflecting improved demand and stronger output. The ISM's purchasing managers index rose to 50.3 in March, the first sign of expansion in the sector since September 2022. Readings above 50 signal growth while those below that level signify contraction.

The March results indicate demand is in the early stages of recovery, with "clear signs of improving conditions," ISM said.

Rail carload volume, excluding coal, rose last month by 2.9pc compared with March 2023, AAR data show. Carload volume is mostly made up of commodities.

But "coal volumes continue to decline due to ongoing shifts in electricity generation markets," AAR's Ghayad said.

Lower natural gas prices have made it difficult for coal-fired generation to compete for dispatch in most of the US since last year. March coal volume fell by about 17pc from the year-earlier period, US Surface Transportation Board data show.

The only other commodity segment to drop last month were nonmetallic minerals, which includes sand, crushed stone, clay and glass products.

Intermodal freight traffic continues to rise, reflecting stable consumer spending and increasing port activity, and inventory restocking by retailers, Ghayad said.

Intermodal volume, primarily containers filled with consumer goods, rose by 12pc last month compared with March 2023, AAR data shows.

### Railway equipment group warns of boxcar shortage

The Railway Supply Institute (RSI) is urging federal regulators to help avoid a so-called "boxcar cliff," fearing lower compensation rates are contributing to a shortage of boxcars in the US.

Boxcars are essentially rented to railroads, which compensate the owners by paying car hire rates. US rail regulator the US Surface Transportation Board (STB), with a regulation known as the Arbitration Rule, has established a default rate for railcars, primarily boxcars, that do not have a negotiated rate. Those cars are assigned a rate that is equal to the lowest negotiated rate in effect for that equipment type at the end of the previous quarter. Other cars, such as tank cars and gondolas, usually have rates set in negotiated agreements to move various commodities.

The problem is that the default rates can often be as low as 17¢/hour for a boxcar, which often costs more than \$150,000 to build, according to RSI. It is difficult to negotiate

a higher car hire rate with railroads because are very aware of that 17¢/hour default rate, said Paul Titterton, president of North American operations at railcar leasing company GATX.

Those car owners also have to compete with TTX, a railcar pooling company owned by the largest railroads, that are exempt from these rules. TTX did not respond to calls for comment.

Because they control TTX, railroads can invest and set boxcar rates they consider to be remunerative, Titterton said.

There are about 100,000 boxcars in North America, and the low compensation rate is disincentivizing shippers from building and buying new boxcars, said Patty Long, president of RSI, which represents rail car makers and parts manufacturers.

The existing "car hire system discourages investment in this integral component of our rail transportation fleet, with boxcars providing efficient shipping for crucial American commodities," she said. Boxcars are used to haul a wide array of goods including pulp, paper, beverages and canned goods.

The default rate does not respond to changing market conditions, such as the shrinking equipment fleet, Long said.

That low compensation rate contributed to a 38pc de-

## QUOTE OF THE WEEK

"We are all waiting for a strong rebound in China."  
– Asia Pacific participant

cline in the number of boxcars in the US since 2008, RSI said. And the aging boxcar fleet is expected to decline another 22pc by 2030.

RSI has petitioned the STB to revisit its Arbitration Rule and reevaluate the way compensation is determined.

Industry trade group the Association of American Railroads said it is reviewing the petition and deciding on its next steps.

STB's Railroad-Shipper Transportation Advisory Council last year urged the agency to look into ways to head off the "boxcar cliff." The group noted that most railcars have a 50-year lifespan, and the retirement of boxcars built in the 1970s and 1980s is accelerating.

"As a result, the North American railroad system and shippers across the US face a devastating boxcar shortfall without sufficient new production to replace thousands of mandated and other planned boxcar retirements," the group said in a March 2023 white paper.



Argus Global Polyethylene is published by Argus Media group

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#### ISSN: 2634-7954

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