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Key insights

Running out of steam?

China macro data for April appears to back the narrative that the economy is on a downtrend. The country's official manufacturing PMIs contracted again in April, the real estate sector remains weak and output in the "New Three" industries (electric vehicles, batteries and solar panels) softened. Implied coal and oil demand also dipped. However, other industrial output including metals and iron ore still recorded growth while imports of iron ore and copper also rose y/y. The loss of momentum in a number of sectors is at least partly seasonal, as is the dip in oil and coal consumption. So before assuming the worst for the Chinese economy, observers should reserve judgement at least through the summer pending fresh data and policy guidance. The Third Plenum in July will be an important signpost of the macroeconomic direction.

Certainly on the energy policy front, there are signs that support for energy-intensive industries is waning. Even the "New Three" industries, a key driver of China's economic expansion, may be running out of steam. During President Xi Jinping's tour of Shandong, he reportedly said that new energy should not be the sole focus of investment, a very gentle nudge to manufacturers to limit excess capacity. This does not stem from international pushback (although calming those pressures is an added bonus) but rather from falling domestic margins. Overcapacity in the solar sector has driven prices of components below production costs, leading to massive industry losses. Even exports are fetching lower revenues because of falling prices. Calls are rising now in China for the government to step in and bail out the sector. All this points to more bad news on the macro front. And a weaker industrial outlook could start feeding through to energy demand later this year.

Which target matters more?

Meeting China's economic targets for the year is looking challenging, but not impossible. China's environmental targets for 2025, however, will not be achieved. As a reflection of the fact that China is not on track to meeting its 14th Five Year Plan energy and carbon intensity targets, the State Council published at the end of May an *Energy Conservation and Carbon Reduction Action Plan (2024-2025)*. The Plan looks to reduce standard coal use and emissions in the steel and petrochemical industries—potentially entailing stricter enforcement on refining capacity additions and oil product exports—as well as in the nonferrous metals sectors. While the Plan leaves considerable room for interpretation at the local level, the message is clear: efforts toward limiting coal use and reducing emissions in energy-intensive industries need to accelerate. This will inevitably weigh on industrial activity as well as on oil and coal use. The impact on coal will become visible in the coming months, even though a hot summer could lead to higher coal imports. Oil product exports seem set to soften as the government is likely to cap quotas and with weak margins, crude imports could slow. That said, crude demand for petrochemicals will likely remain strong as this remains a priority sector for the government.

In China's energy mix, gas stands to benefit, especially as delivered LNG prices have averaged $11/mmbtu compared to $13.5/mmbtu in the first four months of 2023. Guandong and Shanghai are looking to capitalise on lower costs and designing new pricing schemes to allow gas-fired generators to adjust prices, but also to pass on costs to end-users more regularly. Gas in power could as much as double from 126 GW in 2023 to 250 GW in 2030, but it will need adequate pricing mechanisms to do so. But deeper market reforms are not on the cards right now.

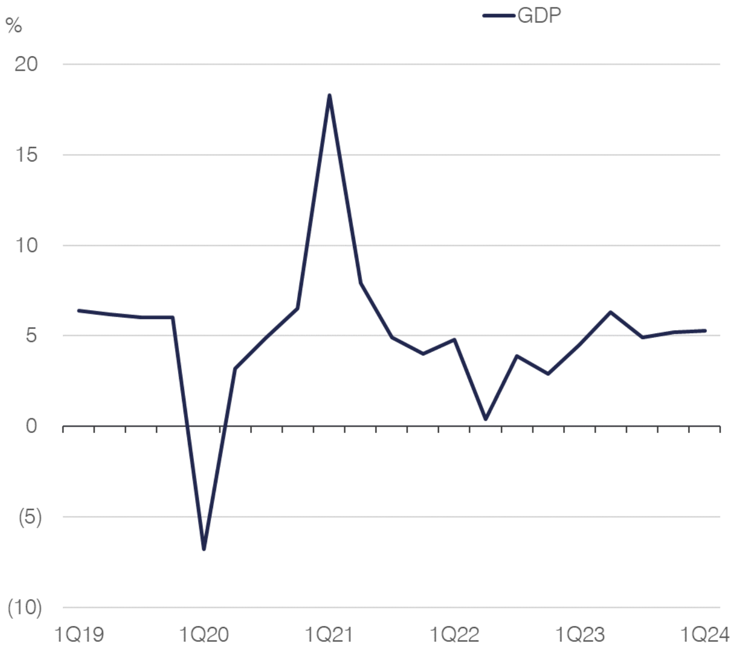
A lean, green, administrative machine

Since the Plan also encourages electrification of iron, steel and nonferrous metals production, which will rely on renewables, it discusses the need to boost renewable integration by accelerating storage additions. Already, China's electricity demand is growing above GDP, with renewables expanding their share of power generation. But excess capacity is a worry as long as grid connections lag. Until these catch up, renewable curtailment will rise. While the senior leadership understand the challenge of integrating renewables, administrative mandates are preferred over market mechanisms. Similarly, the carbon market, slated this year to extend to cement, aluminium and even steel, is just chugging along. Appetite for market reforms also seems to be waning.

Macro

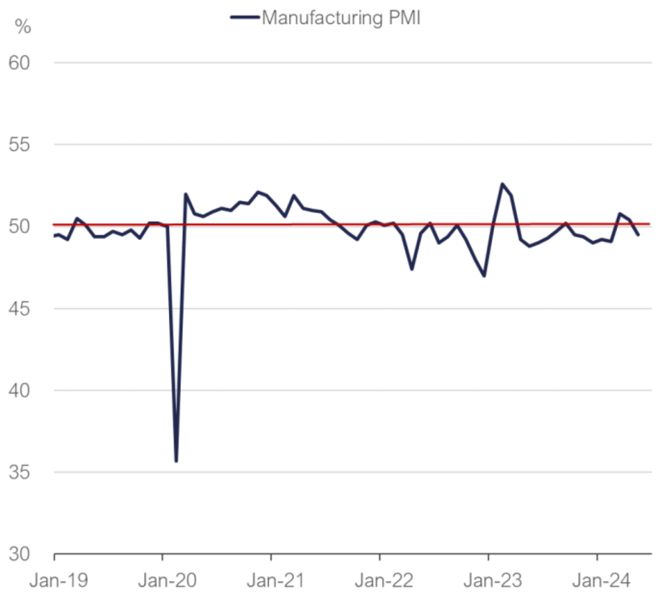
- China's official manufacturing PMI dipped again in May, but the Caixin/S&P PMI—a private sector survey—showed growth due to production gains and new orders, particularly at smaller firms.
- The IMF has revised up its forecast for China's GDP growth in 2024, now expecting a 5% increase. But the outlook remains challenging due to the weakness in the real estate sector, softer than expected fixed asset investment growth and weak consumption data.
- Beijing is now helping local authorities purchase unsold homes and re-sell them as affordable housing. While this and other targeted measures could stabilise the real estate sector, it is unlikely to boost growth. Meanwhile, industrial activity is also holding up.
- The market now awaits the Third Plenum in July. It will likely focus on building a "high-level socialist market economy" but this catch-all phrase can be interpreted in many ways. It likely includes a tightening of the Party's grip on the economy with some more pro-business rules. But hopes of deeper reforms seem unrealistic.

China GDP growth, y/y, %



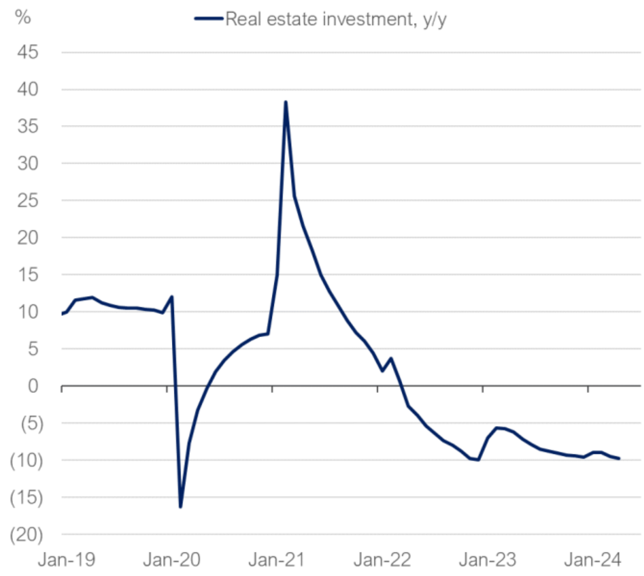
Source: NBS, OIES

Manufacturing PMI



Source: NBS, OIES

Real estate investment, y/y change

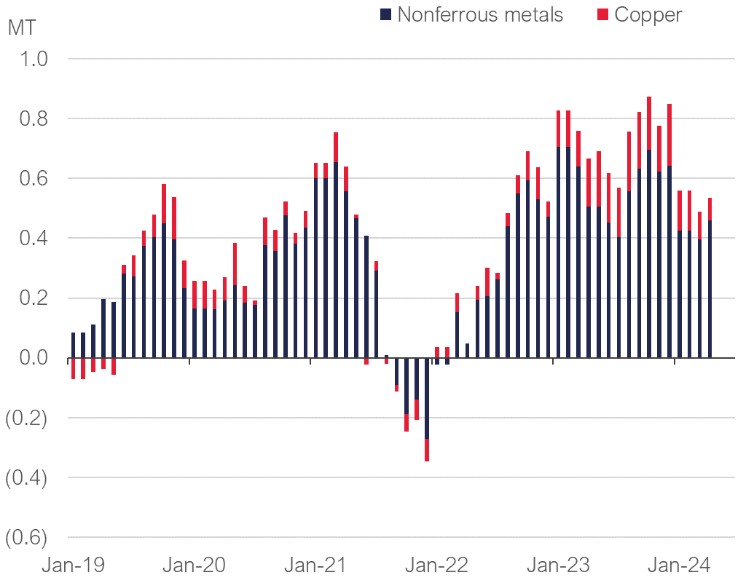


Source: NBS, OIES

Industrial activity: Looking up

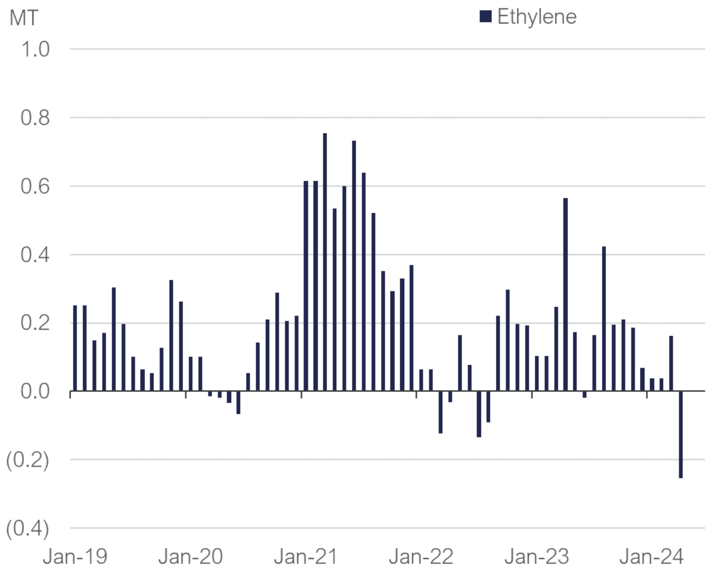
Despite a contraction in ethylene output (likely related to refinery maintenance) production of metals and ores—key sectors for gas consumption—continued to grow in April. Highway freight also picked up m/m and y/y suggesting that despite weak official PMIs and a very cautious outlook, the economy is stabilising.

Non-ferrous metal and copper production, y/y change



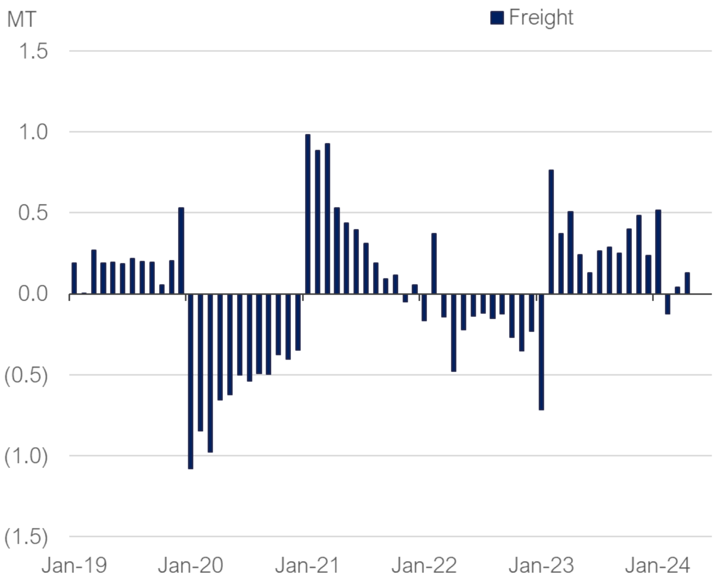
Source: NBS, OIES

Ethylene production, y/y change



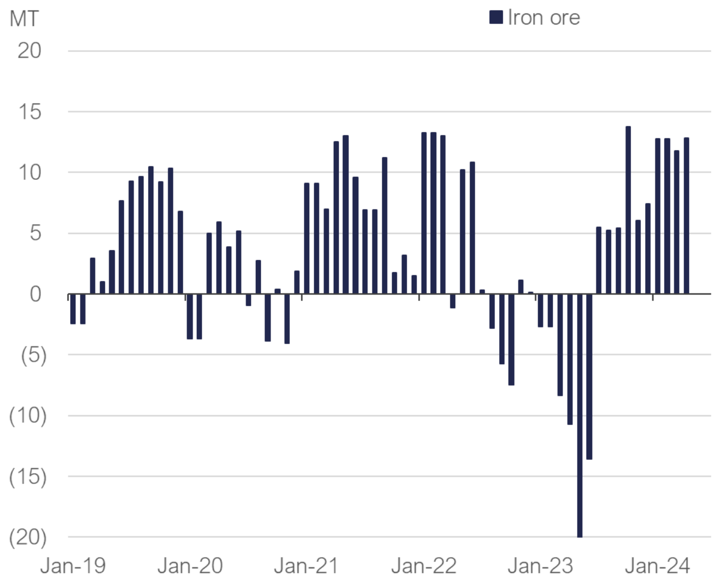
Source: NBS, OIES

Highway freight, y/y change



Source: NBS, OIES

Iron ore production, y/y change



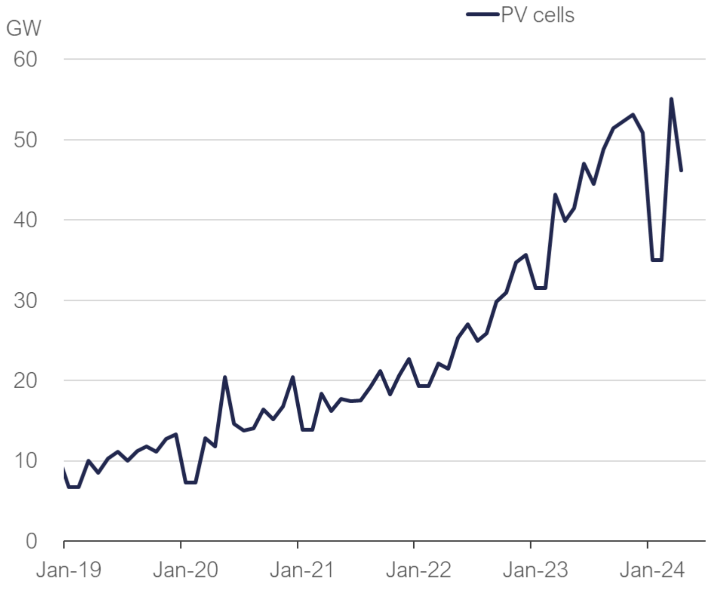
Source: NBS, OIES

Macro

Growth in the “New Three” eases

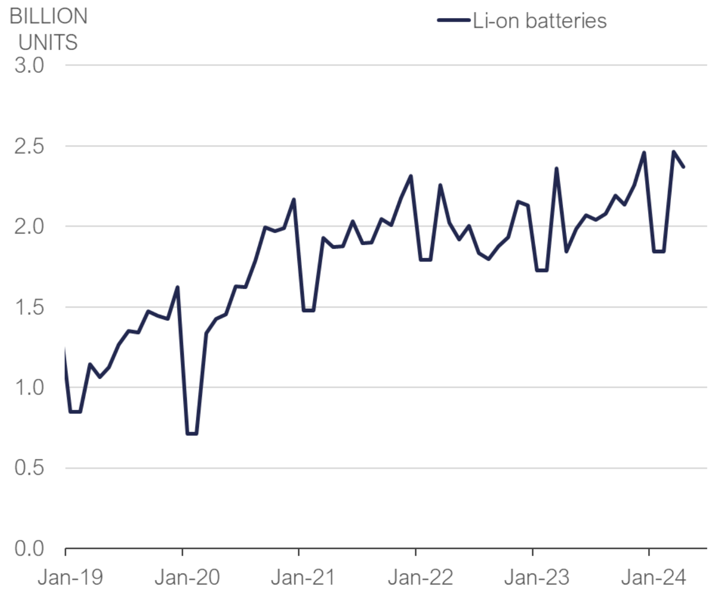
Vehicle production dipped seasonally, while EV sales and exports continued to grow, albeit at slower pace. Production of PV cells and lithium ion batteries softened m/m but were still higher y/y. Margins may be starting to bite and President Xi warned against over-investment in new energy.

Output of PV cells, GW



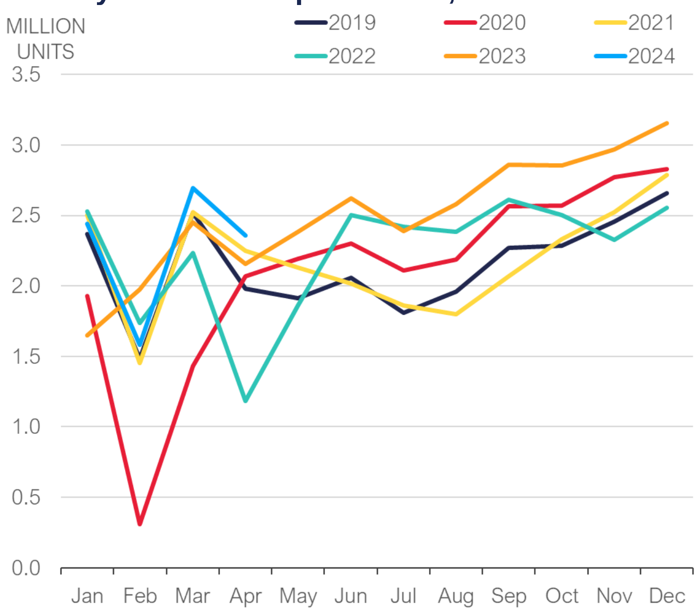
Source: NBS, OIES

Production of Li-ion batteries, billion units



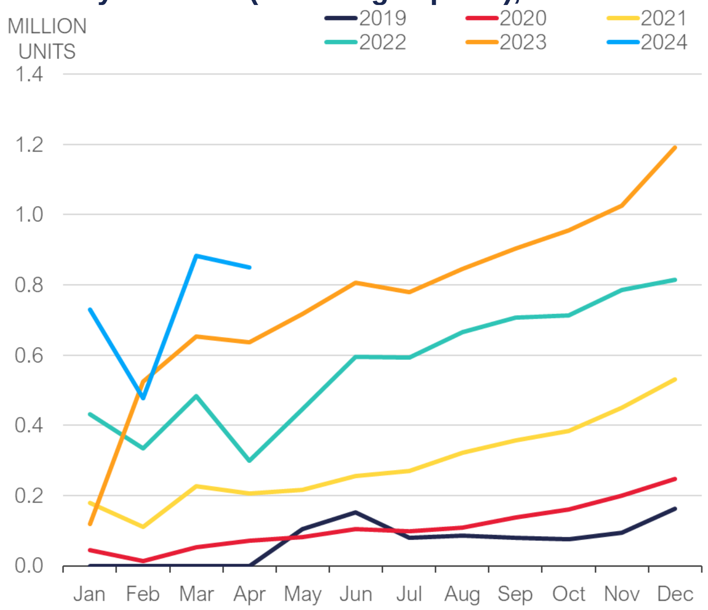
Source: NBS, OIES

Monthly total vehicle production, millions



Source: CAAM, OIES

Monthly EV sales (including exports), millions



Source: CAAM, OIES

Energy fundamentals

- Despite the weak macro environment and the seasonal downswing in power demand, consumption grew rapidly in April compared to 2023 levels. Electricity demand in the service sector is rising at double digit rates (+10.8% y/y), from a high base in 2023.
- Power demand from manufacturing was also strong in April (+6.2% y/y), suggesting relatively healthy industrial activity and highlighting a mixed picture for different sectors.
- Residential consumption has been increasingly steadily but could rise more rapidly in the coming months due to heatwaves across the country.
- Renewables, including hydro, are supplying the vast majority of incremental demand. Solar in particular is surging. Actual generation is likely higher as official data exclude distributed solar.
- Implied coal demand continued to fall in April, driven by lower domestic production as miners sought to manage falling coal prices by limiting output.
- Coal imports continued to rise in April and May to offset the shortfall and to take advantage of competitive prices. Still, the market is now questioning the outlook for coal demand later this year as new government policies look to limit growth in energy-intensive industries. Meanwhile, higher than expected hydro output and renewables are further tempering coal demand.
- Gas demand continues to surge amid lower LNG prices, still strong industrial activity and a renewed focus by provinces on encouraging gas in power.
- Crude imports and runs softened due to refinery maintenance. Crude stocks are high and will likely weigh on imports. At the same time, despite a second batch of export quotas, the government will now likely cap product exports at around 40Mt, compared to market expectations of around 50Mt for the year suggesting limited product exports which could curb growth in refining throughputs.

Energy fundamentals dashboard

y/y growth, %	April	Jan-April
Power generation	5%	7%
Implied coal demand	-2%	-3%
Gas demand	11%	11%
Oil product demand	-2%	6%
Imports		
Coal	6%	12%
Gas	18%	20%
Oil	5%	2%
Production		
Coal	-2%	-4%
Gas	5%	5%
Oil	1%	1%
Wind generation	6%	13%
Solar generation	37%	32%

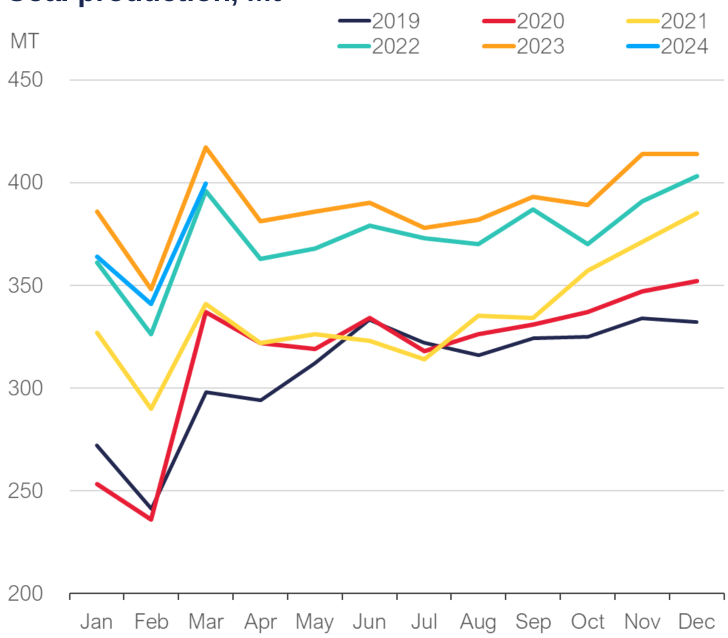
Source: OIES

Coal

Implied coal demand recovering slightly ahead of summer

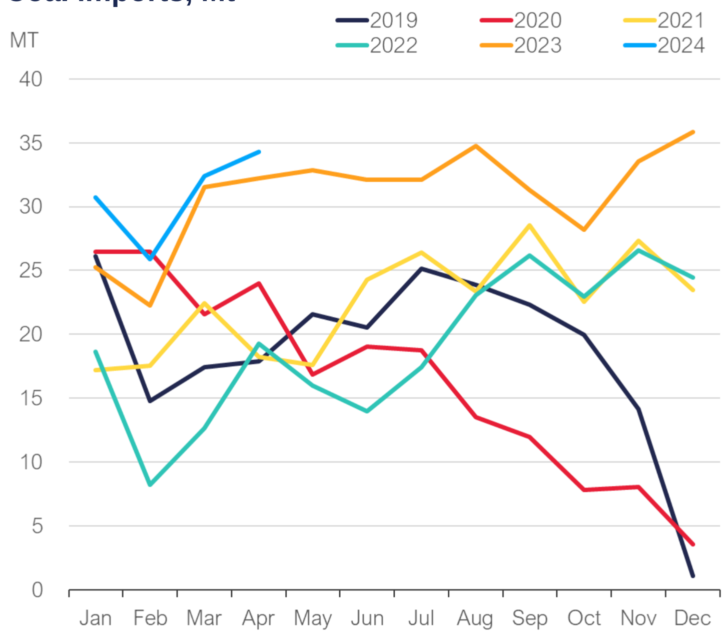
Coal production remained muted in April despite a recovery from March levels as producers looked to contain price declines. With higher imports in April, coal stocks have been filling but utility demand is falling. Imports rose in April and May to offset weaker production but are set to slow in June-July even if domestic production does not rise materially.

Coal production, Mt



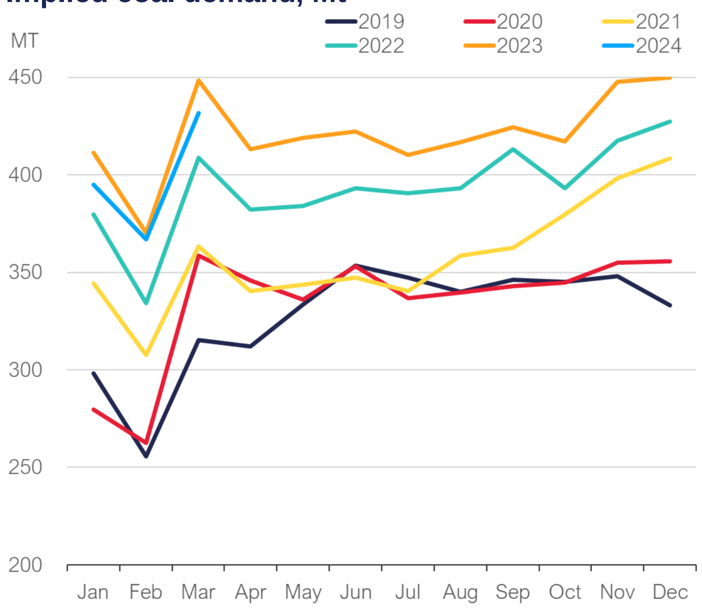
Source: NBS, OIES

Coal imports, Mt



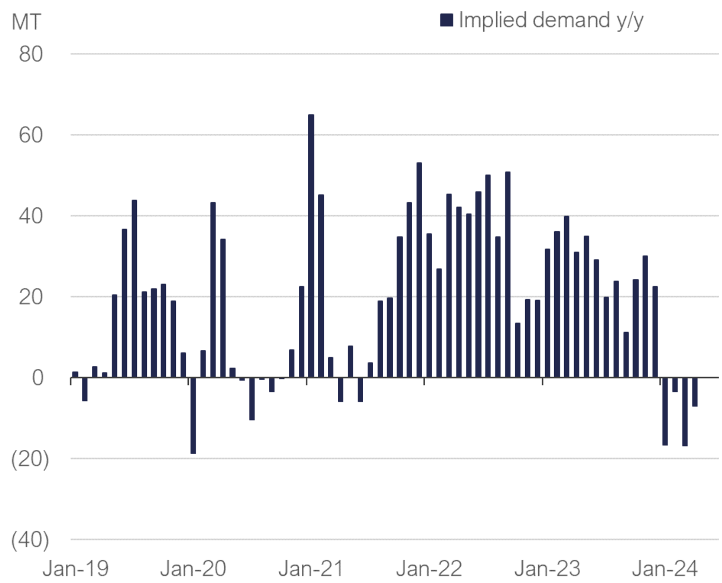
Source: GAC, OIES

Implied coal demand, Mt



Source: NBS, GAC, OIES

Implied demand, y/y change, Mt



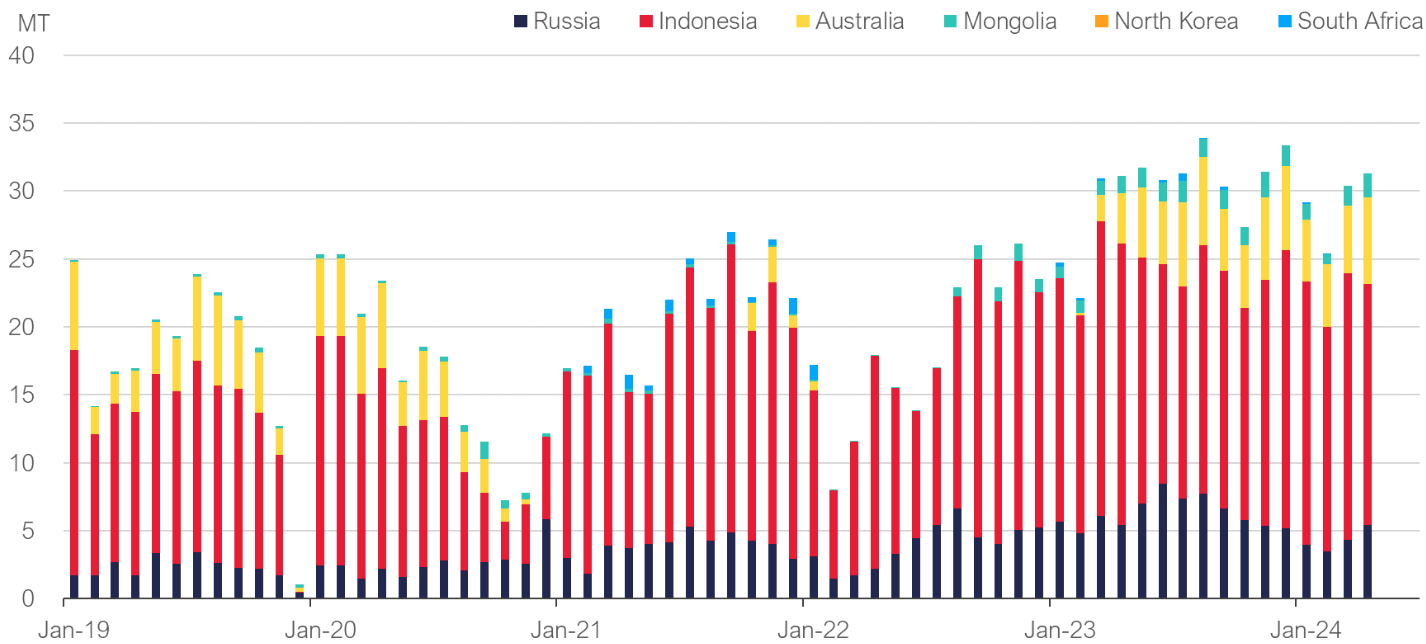
Source: NBS, GAC, OIES

Coal

Australian coal makes a comeback

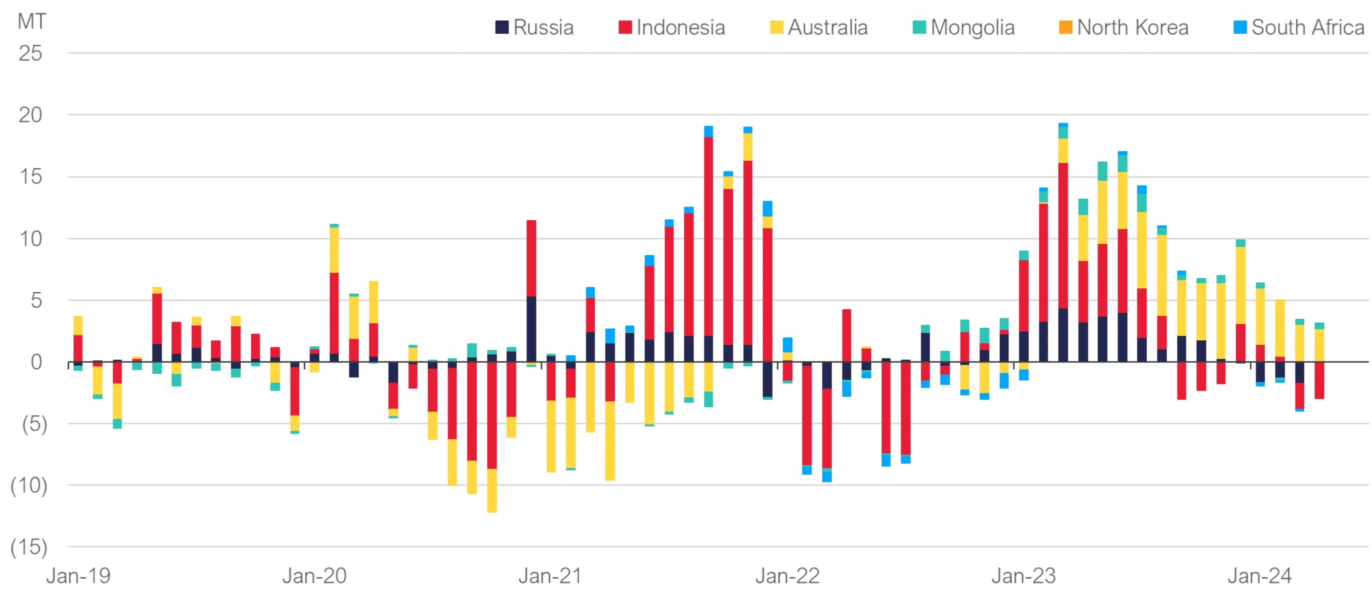
Australian coal increased y/y in part due to the low base in 2023 as well as fierce price competition between Australian and Russian supplies. Chinese buyers do not pay tax on Australian material, suggesting flows could remain strong. Indonesian supplies lost out to coal from the Philippines.

Coal imports by country, Mt



Source: GAC, OIES

Coal imports by country, y/y change



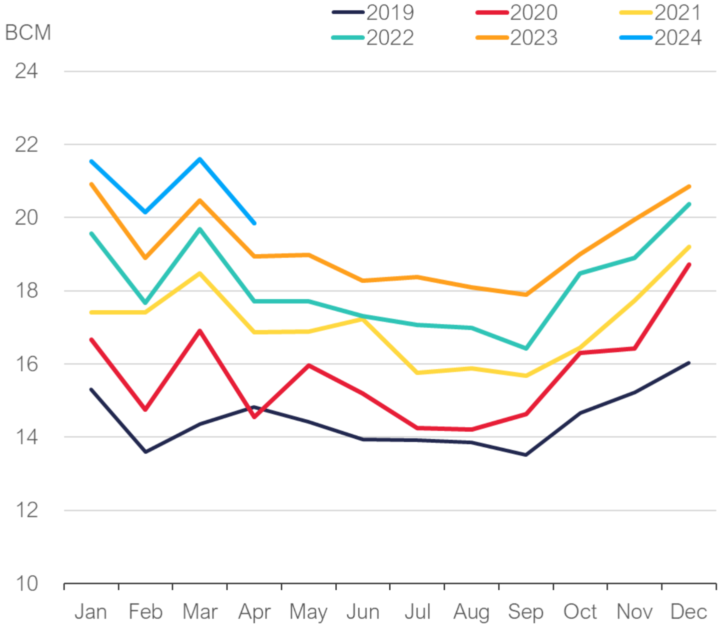
Source: GAC, OIES

Gas

LNG imports spurred by tier-two but buying set to cool this summer

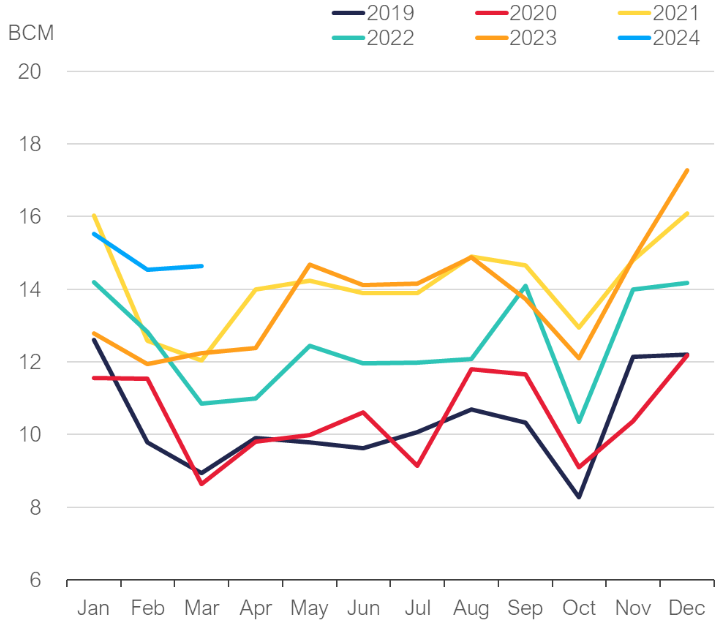
Gas remains the strongest performing fossil fuel with both production and net imports up strongly in April. LNG flows remained strong, with lower prices attracting tier-two buyers. LNG imports more than offset the fall in pipeline flows but data suggest LNG arrivals will slow in May and June as rising European hub prices are likely deterring Chinese spot buyers.

Gas production, bcm



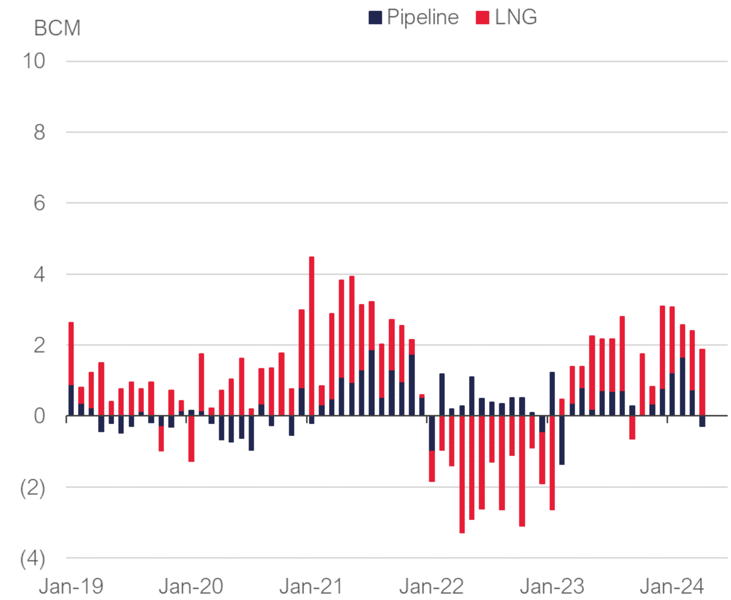
Source: NBS, OIES

Net imports, bcm



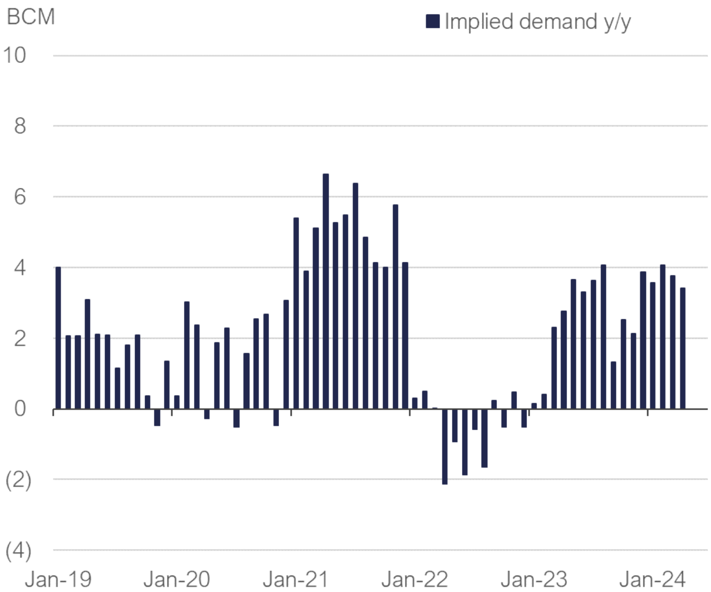
Source: GAC, OIES

Pipeline and LNG imports, y/y change, bcm



Source: NBS, Argus, OIES

Implied demand, y/y change, bcm



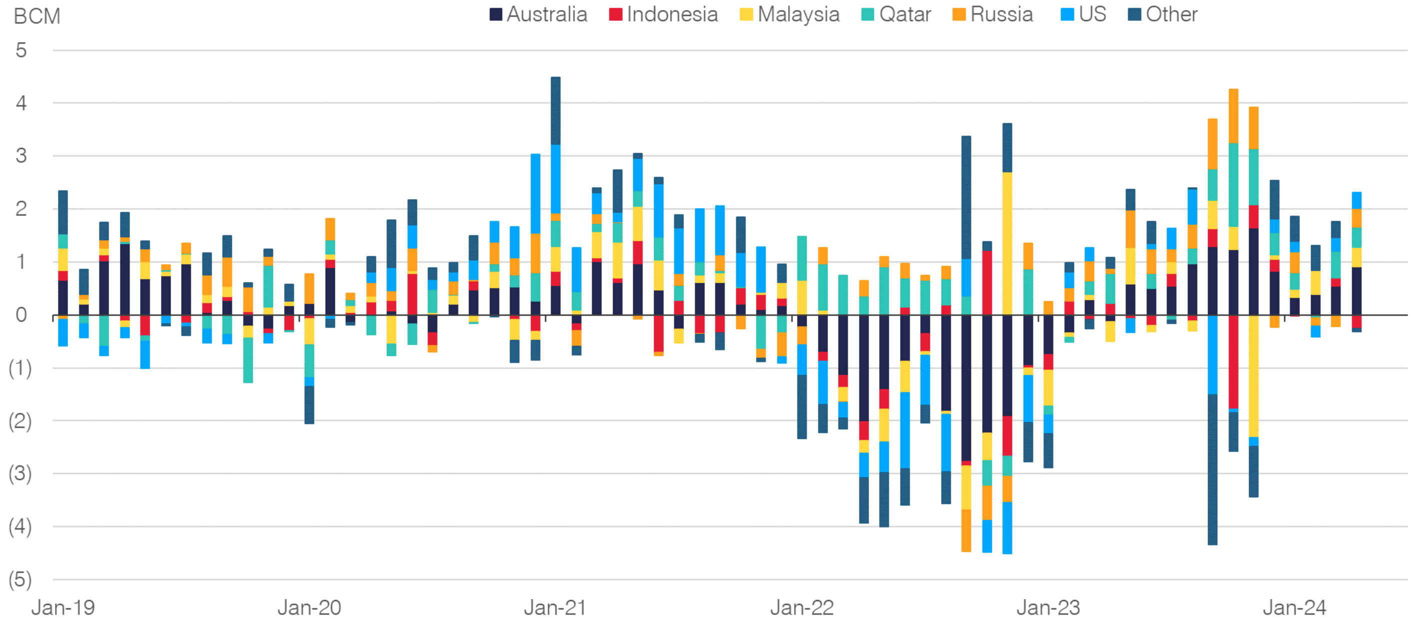
Source: NBS, Argus, OIES

Gas

Russian and US LNG volumes gain momentum

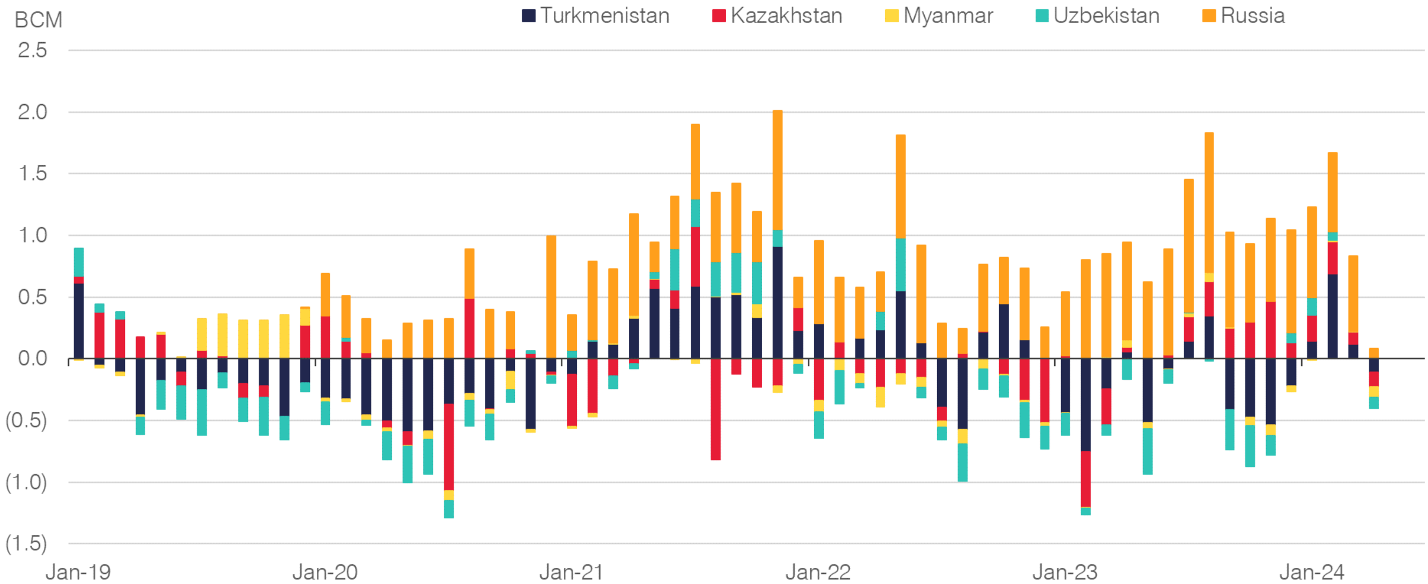
Russian LNG arrivals increased significantly m/m but only inched up from 2023 levels. Qatari volumes fell m/m and y/y despite falling prices. Meanwhile, the average cost of US LNG into China fell by a massive $5/mmbtu y/y suggesting higher flows to come.

LNG imports by country, y/y change



Source: Argus, GAC, OIES

Pipeline imports by country (estimates from 2022)

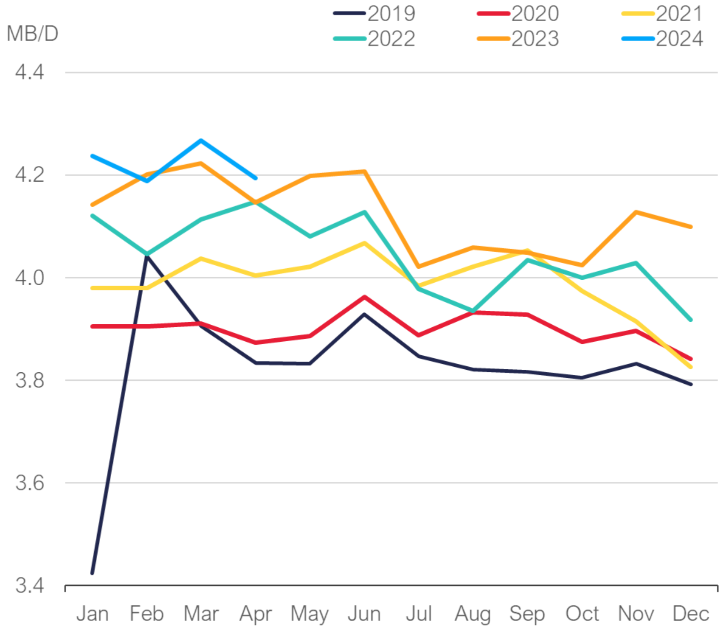


Notes: Import volumes are estimated since China stopped publication in Aug 2022. Source: Argus, GAC, OIES

Buying lull during refinery maintenance but imports rise later this summer

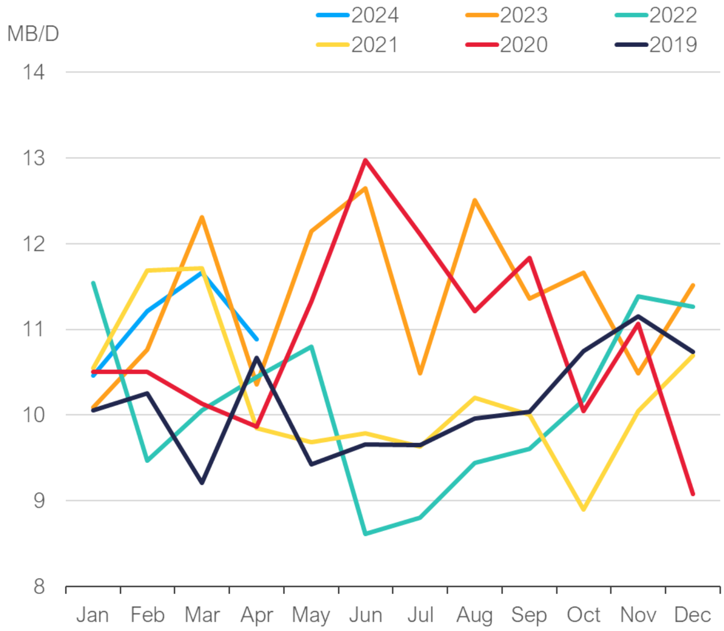
Imports fell m/m in April as refiners started maintenance and margins weakened, but flows are set to recover in May and June ahead of rising demand in the autumn. Crude inventories built and while some draws are possible during turnarounds, stocks are likely to build again.

Crude production, mb/d



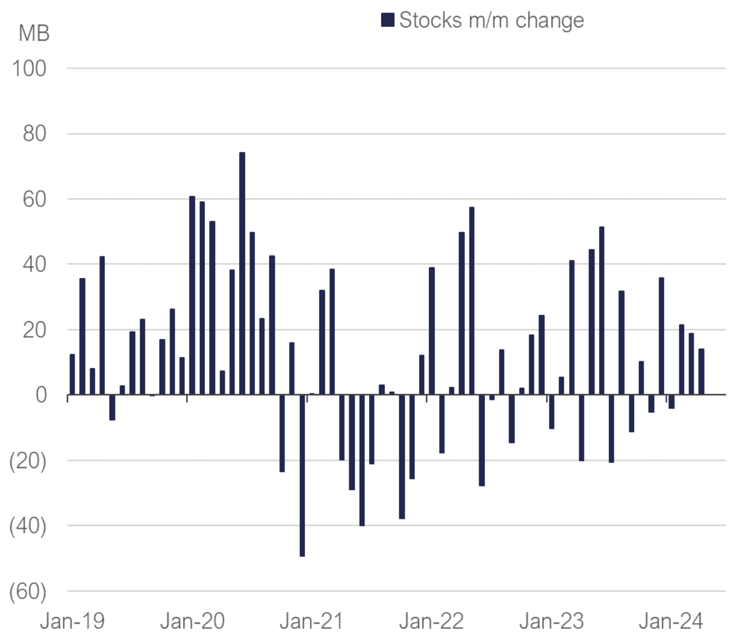
Source: NBS, OIES

Imports, mb/d



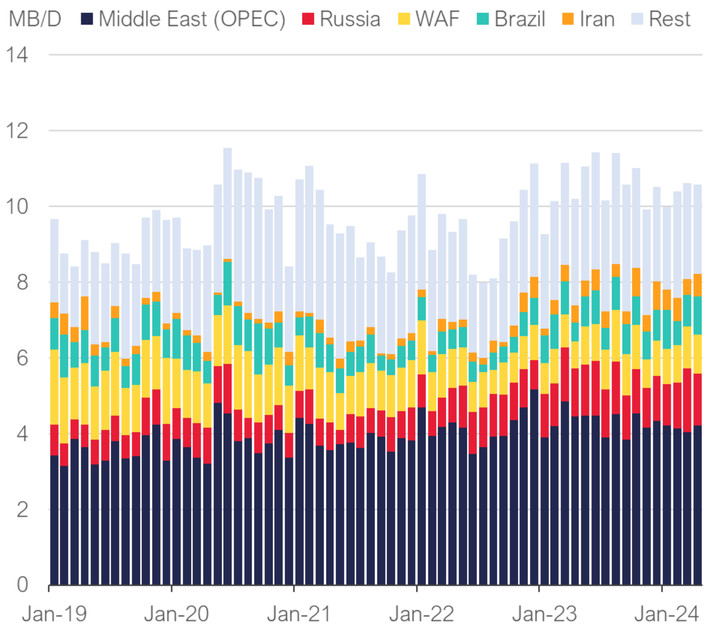
Source: GAC, OIES

Implied stocks, m/m change, mb



Source: NBS, Argus, OIES

Imports by region/country, mb/d

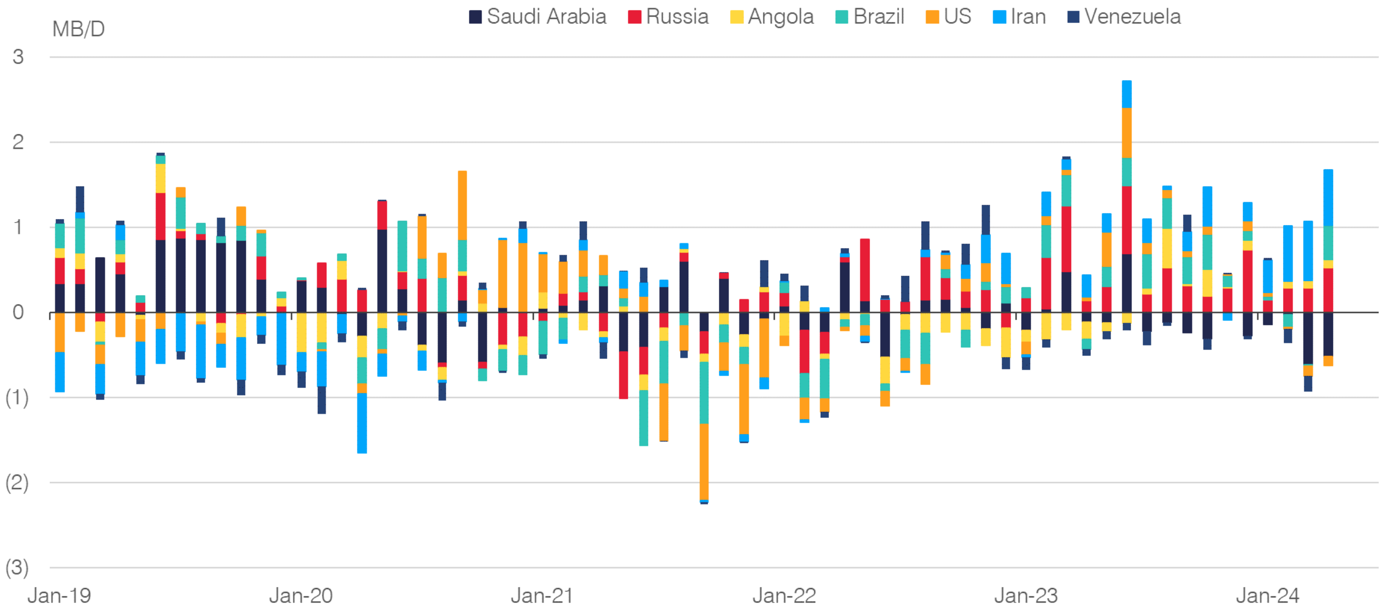


Source: GAC, Argus, OIES

Iran is the star supplier but crackdowns are coming

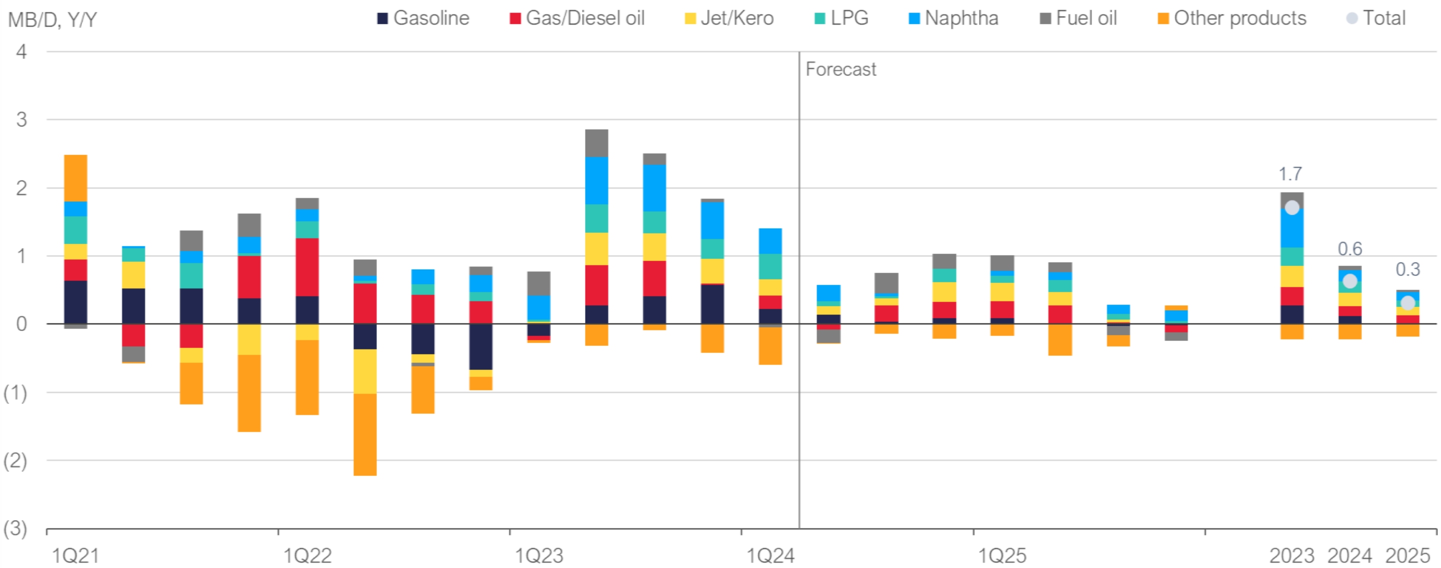
Iranian crude imports are increasing but customs inspections are tightening with the US imposing more sanctions on vessels, so volumes could fall. Russian crudes could pick up with appetite for West African and Brazilian grades also rising this summer. High Saudi OSPs are tempering demand. Oil product demand is driven by petrochemicals but transport demand picked up during the Dragon Boat Festival in June.

Crude imports by select country, y/y change, mb/d



Notes: Iran and Venezuela volumes based on Kpler. Source: GAC, Kpler, OIES

Product demand, y/y change, mb/d



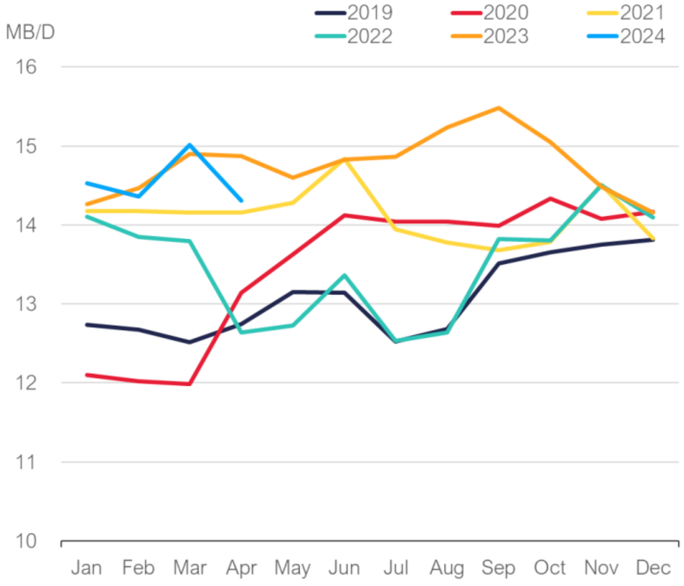
Source: NBS, GAC, IEA, OIES forecast

Oil

Product exports weaker than expected, government plans cap outflows

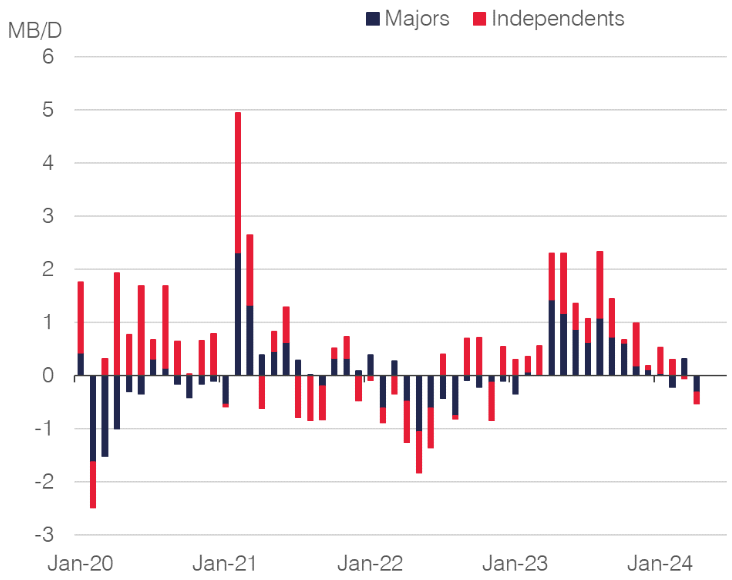
Runs will remain subdued due to maintenance and weak margins. The majors are suffering losses on petrochemicals and even on gasoline sales, leading to more purchases from independents. Exports are still looking limited through June and will remain muted given government plans to cap quotas at 40Mt this year.

Runs



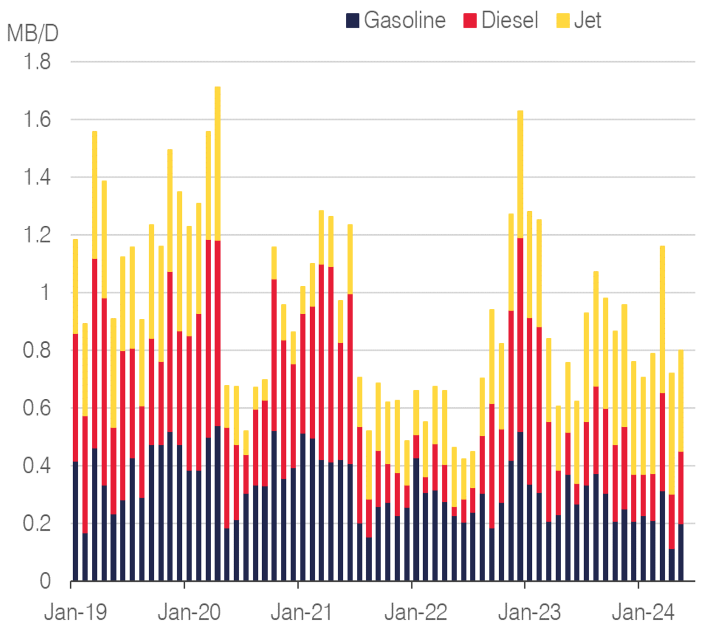
Source: NBS, OIES

Runs by SOEs vs independents, y/y change



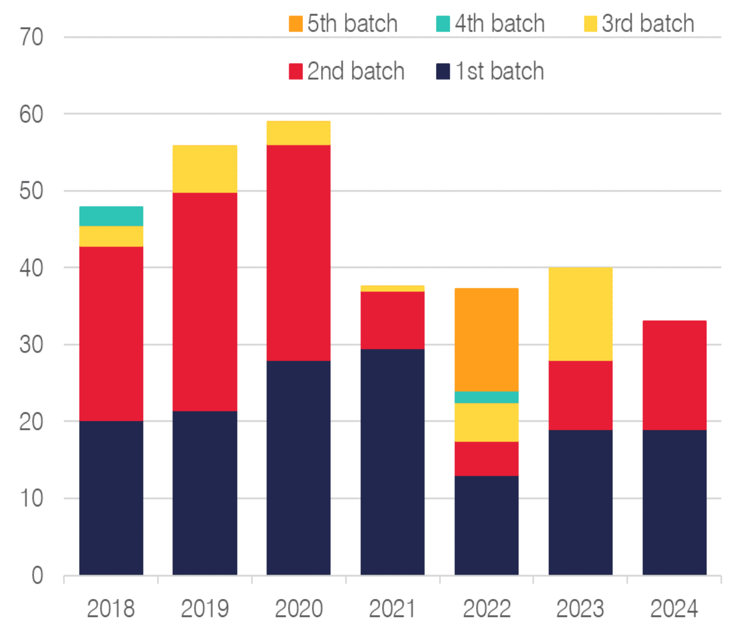
Source: Argus, OIES

Product exports, mb/d



Source: GAC, OIES

Product quotas, Mt



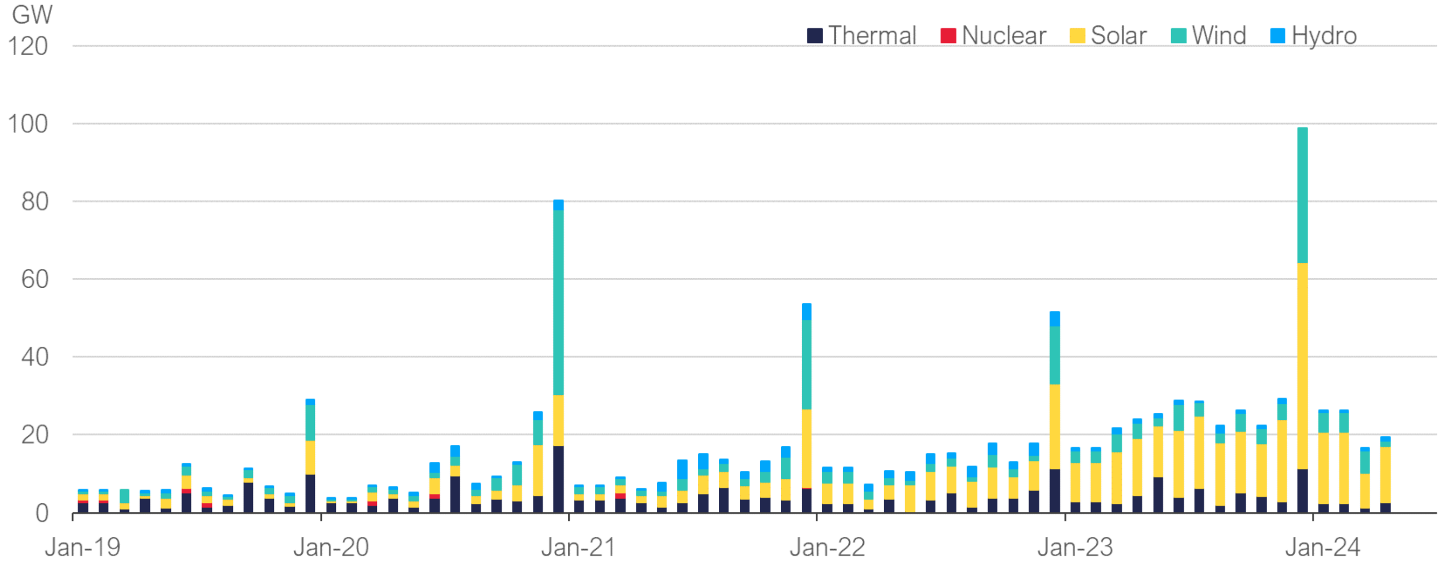
Source: NBS, Argus, OIES

Power

A sunny outlook for solar and hydro

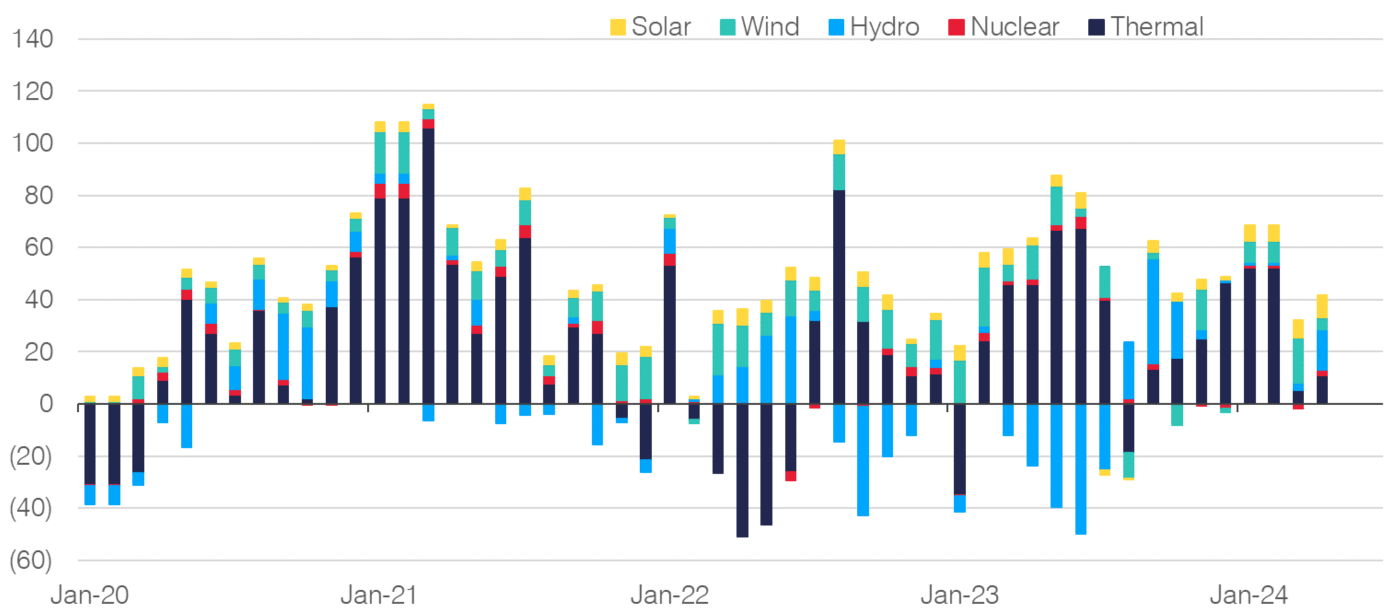
Solar continues to lead new capacity additions. Since distributed solar is not included in official data, actual additions are likely higher. Solar power generation is also rising strongly and with hydro now recovering, thermal generation remained subdued.

Capacity additions by source, GW



Source: NEA, OIES

Electricity generation by source, y/y change, TWh



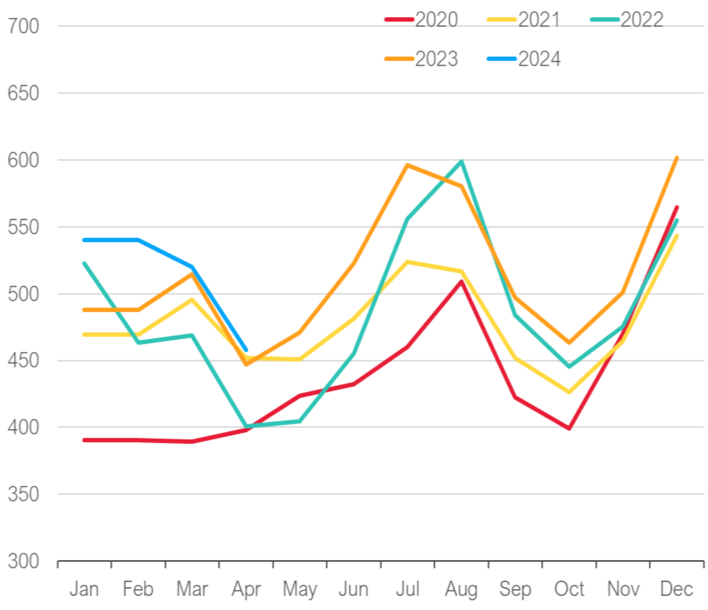
Source: NEA, OIES

Power

Hydro makes a comeback limiting the call on thermal power generation

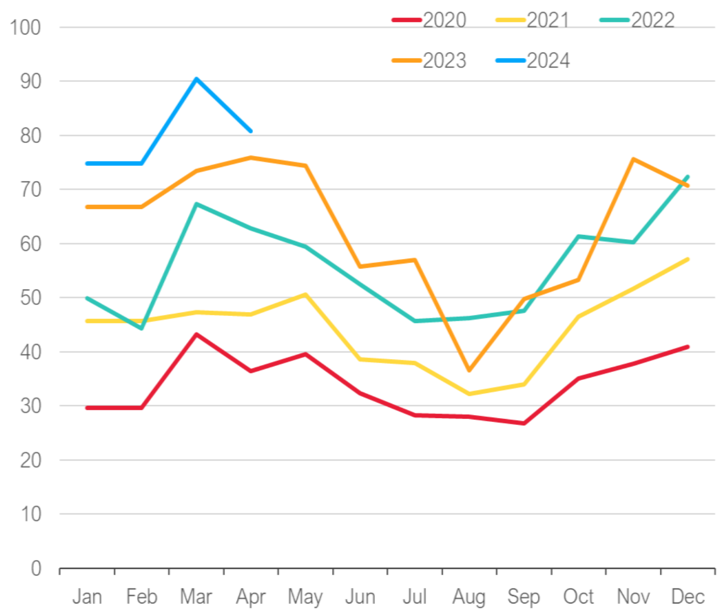
Thermal generation was subdued seasonally and because of weak demand from coal-consuming industries in April. With temperatures edging up, thermal demand is likely to rise even as solar continues to grow but the availability of hydro will temper coal-fired power generation. Gas in power will depend on prices.

Thermal generation, TWh



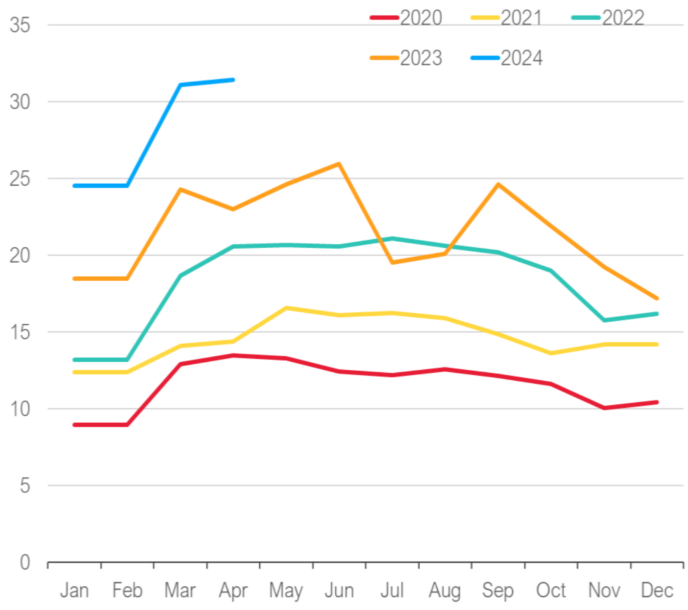
Source: NBS, OIES

Wind power generation, TWh



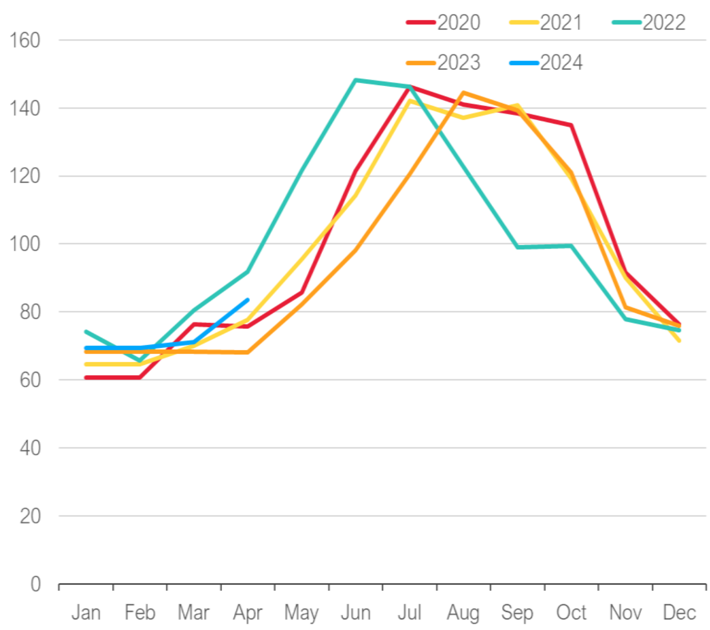
Source: NBS, OIES

Solar generation, TWh



Source: NBS, OIES

Hydro generation, TWh



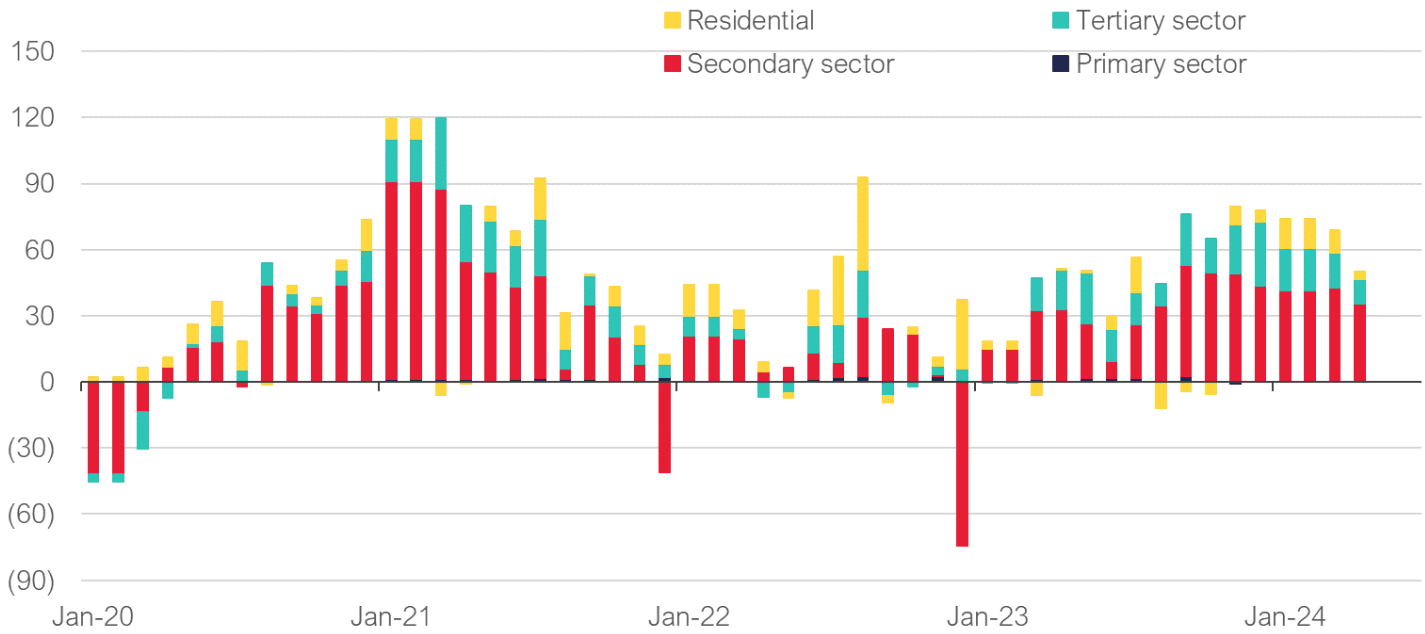
Source: NBS, OIES

Power

Power demand softens seasonally in April

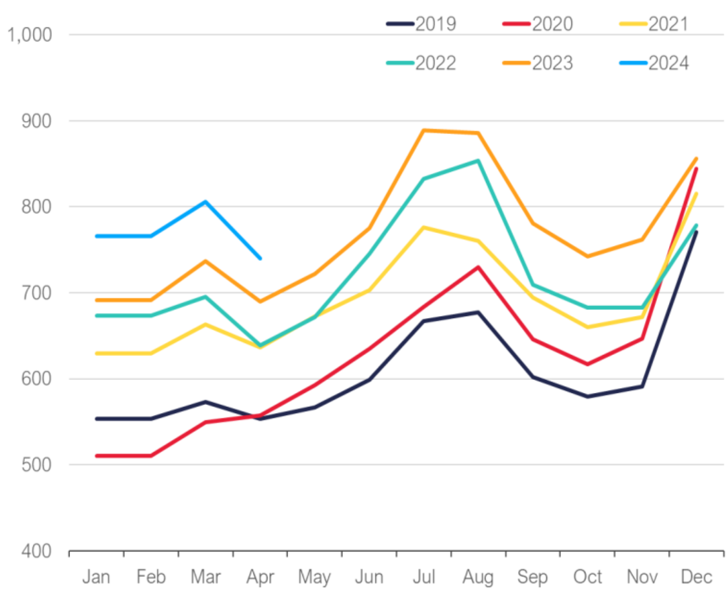
Power demand growth moderated m/m in April, a seasonal softening. But compared to the low 2023 base, power consumption was strong across the board. If government support measures kick in, further growth is expected and residential demand is likely to increase with the onset of cooling season.

Electricity demand by sector, y/y change, TWh



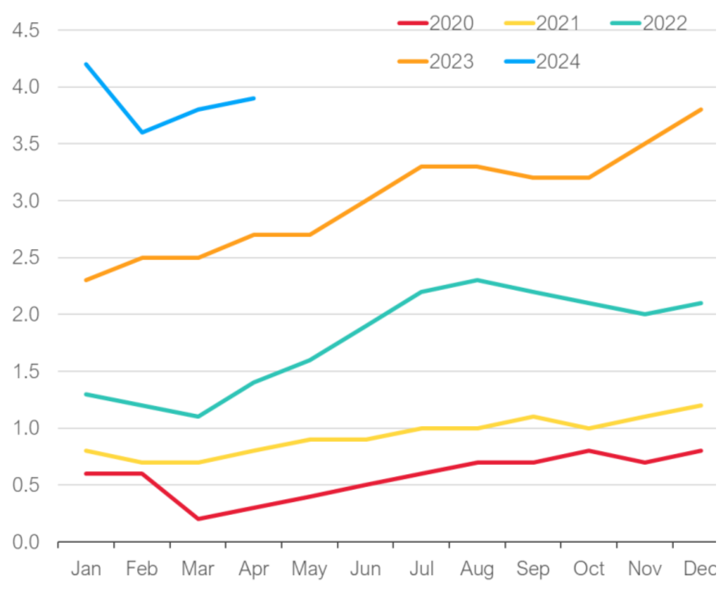
Source: NEA. OIES

Power demand, TWh



Source: NEA, OIES

Total public charging electricity consumption, bn KWh

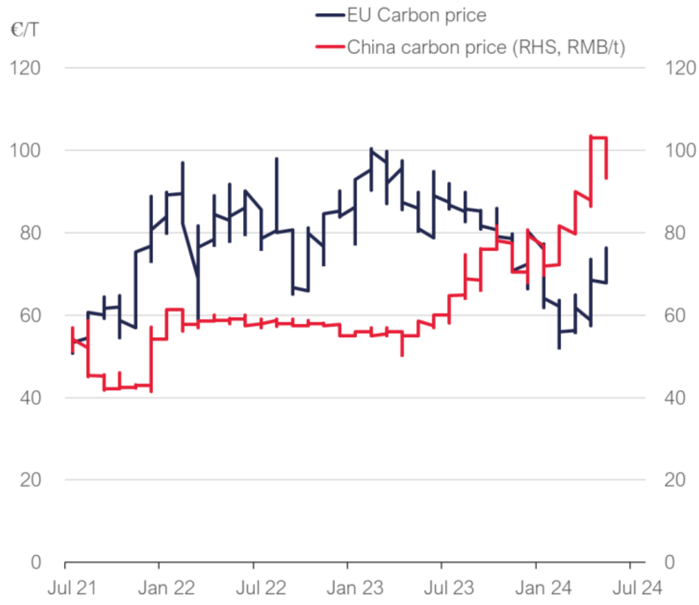


Source: NBS, Argus, OIES

Prices

- China's national carbon price fell m/m in May as the new emissions trading system (ETS) regulations announced in February were implemented. The market now awaits further guidance on benchmarks and the 2023-2024 allocation plan.
- The ETS is expected to begin to cover cement, aluminium and potentially steel this year in anticipation of the EU's CBAM, but data accuracy remains a key obstacle.
- The spread between pipeline prices at the border and LNG narrowed in April but pipelines remain in the money given the longer lag with oil prices.
- Meanwhile, the Shanghai crude contract continues to mirror ICE Brent.

Carbon prices

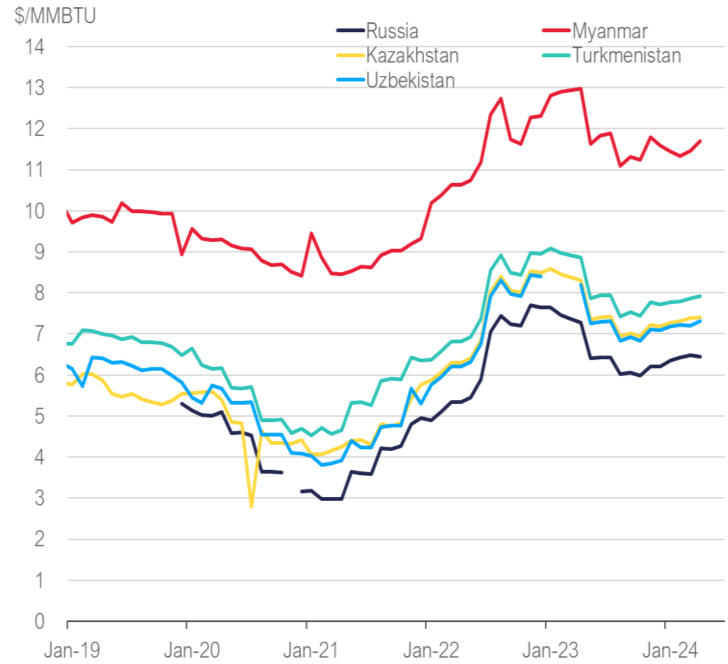


Source: LSEG, OIES

Shanghai crude contract, ICE Brent, $/bbl

Source: INE, LSEG, OIES

Pipeline prices, $/MMBtu



Note: Prices are OIES estimates based on Argus, GAC data
Source: OIES

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