

WA Kaolin - commissioned and ramping up production

I suppose it would be reasonable to ask why so many mining stocks have fallen by so much over the last six months. After all, what has changed? You can look to the weakness in various LME tradable metals and subdued industrial activities that require these metals. You can look to lithium, rare earth and other alternative energy input commodities that have fallen in price. You can look to rising interest rates that have contributed to all of the above, as well as the suppressing effect on consumer demand and the need to divert funds away from the stock market and into higher mortgage repayments. Then we have the surging cost of domestic electricity.

All of these factors have a compounding effect on negative sentiment and it is sentiment that is the essential driver of markets in one direction or another. Some people think it is news flow, but that is only partially responsible, on a stock specific basis. The majority of stock market players don't have the ability, or access to reliable information, to make a fully informed decision. So this is where the emotional side of investing takes over. That is where sentiment and the trends are more influential. You shouldn't try to overthink what the market is doing. Certainly, we shouldn't be trying to apportion blame for share price weaknesses right now when the sentiment is so poor.

Lithium and rare earths are still hot spots in the market, but there is an amazing divergence in the performance of individual stocks. Some are doing very well, while others are being ignored. I'd like to think that is because the market is able to discern between the good and the bad, but naivety and promotion play a big part.

WA Kaolin is ramping up

Continuing with the discussion of kaolin stocks that we introduced last week, we provide an update on the progress of WA Kaolin as it seeks to establish a long-life mine at its Wickepin Project, located 220 km SE of Perth. It is well down the path already, hoping to lift the production rate in the forthcoming December Half to achieve profitability for the first time.

A typically slow start for industrial minerals co.

After a development and commissioning period that dragged on for 18 months longer than expected, WA Kaolin (WAK) is on the verge of reporting a positive cashflow from operations - hopefully by Christmas. It started commissioning the plant in September 2022, and by mid May 2023, the processing plant had achieved the 24 hr/day operating status. Though late, it was finished in-line with the \$18m budget.

It is rare for new plants to work perfectly when the switch is flicked for the first time, so WAK's performance could be called typical. Firstly, the kiln was overheating and the heat transfer feature wasn't optimally achieved. That required a redesign of the kiln. Secondly, the off-grid power system

didn't work properly to begin with. As anyone who has set up an off-grid system will know, the so called experts don't seem to be as good as they represent. In the case of Wickepin there needed to be remedial work undertaken on the configuration of the equipment and related software in order to get it to work properly.

The power system comprises three 550 kva generators and one 50 kva backup generator, all fed with diesel. Two generators operate at any one time with the third one being rotated into the mix at regular intervals. After 12 months of experience, the intention is to install a solar system with batteries. The generators will be converted to LNG fuel, still be used in tandem with the solar, when necessary. No solar system can work reliably without a fossil fuel backup. The capital cost of the exercise will be about \$5-6m, with most likely a private contractor providing the finance pursuant to a Power Purchasing Agreement. Power costs are expected to come off slightly, by 15% when this is undertaken.

Another aspect of the commissioning that requires further work is the optimisation of the product grades. The two coarser grades are achieving specifications and throughputs, but the two finer grade lines, which will account for approximately 70% of sales revenue, need more work. This might involve the expenditure of \$2m.

The Wickepin Mine and Processing Plant

The operation is based on a very large kaolin orebody comprising a reserve of 30.5 Mt, within a 644 Mt resource, purchased from RIO in 1999. That gives a mine life of hundreds of years. One of the highlights is a very low level of contaminants such as iron oxide and titanium oxide. This means that the process flow sheet doesn't need to include chemical bleaching and that helps keep operating costs down.

WAK initially operated a small scale, 5 tph pilot plant at Kwinana, south of Perth. That led to the construction of a 25 tph commercial scale facility at Wickepin that enables the production of 200,000 tpa of saleable product. The eventual aim is to spend another circa \$16m to double production to 400,000 tpa, at which point the economies of scale should become apparent.

Opportunities to upgrade product, in time

WAK has initially embarked upon the dry kaolin production process as it was the lowest cost start-up option, but it is doing the research into a combined dry and wet facility. The dry plant can only achieve up to 70% passing 2 microns rather than the 95% passing two microns that can typically be achieved with a wet plant, which locks WAK out of the premium paper market. However, the Company could be up for an additional \$50-80m in capex to achieve this outcome. For the time being it is concentrating on the lower profit margin, commoditised market.

The economics of a bulk scale operation

WAK sells its product on an fob (free on board) basis due to the volatility of shipping rates. These have varied from \$400 per container pre-covid to \$2,000 per container during covid, and more recently \$600 per container. Given that the average sales price is around \$200 pt, an operating mine could not handle this impost. So, freight and associated rate risks are covered by the buyers.

The high cost of freight means that shipment to Europe is not economic, so Asian markets are the focus. WAK has already established relationships with about 40 active customers, though the smaller number of 15 bulk buyers constitute the greater majority of sales.

WAK is expecting to receive revenue of \$280 pt once everything settles down, with anticipated operating costs of \$200 pt. At a production rate of 200,000 tpa, this could generate positive cash flow of \$16m. This would place the company on a cash flow multiple of 3-4x. That sales price is probably at least 50% lower than prices sought by Andromeda and Suvo Strategic, but these companies will be operating at lower scales.

A useful addition to the Wickepin plant that will boost profit margins is a \$2.5m state of the art bagging facility from Germany. This will enable the packaging and sale of 20 kg bags with a higher profit margin than one tonne bulk bags. It is currently being commissioned.

The Bottom Line

The slow start up would have been a disappointment for the more optimistic shareholders, but that should be fully factored into the share price today. From this point forward we expect that share price movements will be determined by news relating to the improvements and optimisation referred to above.

If everything goes according to plan over the next six months, and the \$16m p.a. cash generation figure is achieved, there is good upside in the share price. Cash levels as at 31/3/23 were a modest \$2.7m. While there is no immediate intention to go to the market for more funding, one should not discount the possibility ... especially if the share price firms up from here.

The current debt level stands at \$23.4m (unsecured) with an interest rate of only 3.2%, but this is owed to the largest

shareholder group. Repayments are linked to cashflow so it is expected to be more user friendly than standard bank or third party debt.

Longer term the share price will be influenced by the potential for doubling the capacity to 400,000 tpa, the financing method and the potential impact on profitability of the installation of a wet plant. On the green technology front there may be the possibility of sales of metakaolin to the cement industry, but this requires further research. There is upside potential for growth.

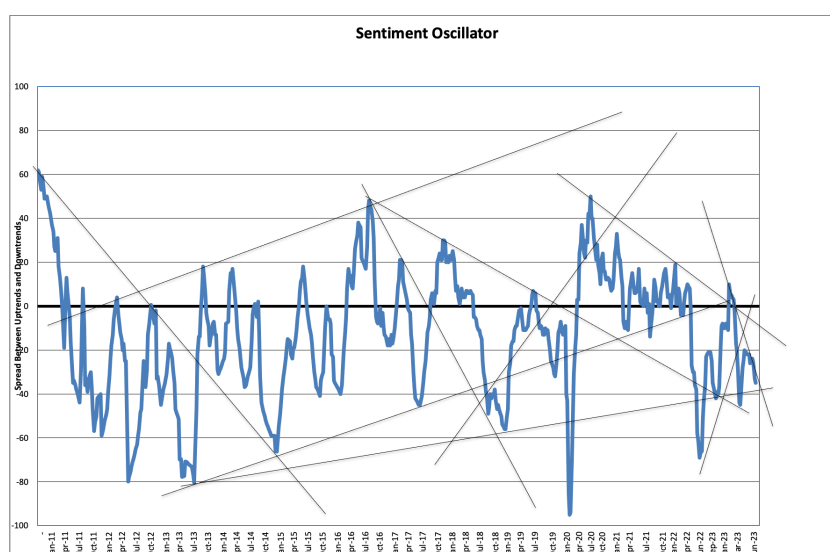
The shares continue to be trapped in a downtrend that commenced on 30/7/21, when the shares were 24¢. They are now 50% below that peak, so the performance has probably been in-line with, or better, than most junior miners on the ASX.

Beware of the new Aboriginal Heritage Act

While we are suffering from an annoying and constant daily barrage of propaganda as to why we should vote in favour of The Voice, there is something else that directly affects the mining and exploration sector in Western Australia. The 1st July sees the revised Aboriginal Heritage Act take effect. I did receive an email that attempted to explain the implications, but it was very complicated and confusing.

Going straight to something that is easy to understand, there is the introduction of a 7% tax on exploration undertaken on certain Aboriginal land. I don't have details of how wide reaching this will be, but the idea of having to pay Aboriginal communities an impost of 7%, based on expenditure, is an anathema to me. It is not a royalty on production - that is something that comes later - it is an upfront payment, whether or not there is any discovery or income eventually generated. Effectively, investors in the small exploration stocks will have to stump up even more high risk capital for these companies. That is a disincentive. I thought WA was supposed to be a low geopolitical risk state! Just remember that the Labor Party, Federal or State, is more likely to pass legislation that is detrimental to the mining sector. Remember the Resources Rent Tax.

We have added Midas Minerals (MM1) to our chart coverage.



Sentiment Oscillator: Sentiment dropped again last week. There were 20% (21%) of the charts in uptrend, and 55% (54%) in downtrend.

Detailed Chart Comments

NB. Only the bold comments have been updated. Comments in grey type are from previous weeks and will be less relevant. Please note that this list is a cross section of the market. It IS NOT a list of recommendations.

| Indices | Code | Trend Comment | |
|---------------------------------------|------|--|---------------------------|
| All Ordinaries | XAO | on support line in wedge | |
| Metals and Mining | XMM | failed at resistance line | |
| Energy | XEJ | edging higher | |
| Information Technology | XIJ | pullback | |
| Stocks | Code | Trend Comment (updated comments in bold) | Main Interest |
| 5EA Advanced Materials | 5EA | breached downtrend, then slumped | boron |
| 92 Energy | 92E | stronger, within a longer term downtrend | uranium |
| A-Cap Energy | ACB | still at lows | uranium |
| Alpha HPA | A4N | new high | HPA |
| Adriatic Resources | ADT | off its highs | zinc, polymetallic |
| Advance Metals (was Pacific American) | AVM | back to lows | coal, gold exploration |
| Alkane Resources | ALK | testing uptrend | gold |
| Alicanto Minerals | AQI | sideways at lows | base metals, silver, gold |
| Almonty Industries | All | weaker | tungsten |
| Altech Chemical | ATC | failing at resistance line | HPA, anodes |
| Anteotech | ADO | back into downtrend | silicon anodes, biotech |
| Alto Metals | AME | still in downtrend | gold exploration |
| American Rare Earths | ARR | down steeply | rare earths |
| Antilles Gold | AAU | rising | gold |
| Anax Metals | ANX | sideways below 8c | copper |
| Arafura Resources | ARU | down | rare earths |
| Ardea Resources | ARL | new low | nickel |
| Aurelia Metals | AMI | back to lows | gold + base metals |
| Australian Rare Earths | AR3 | heavy correction on placement | rare earths |
| Arizona Lithium | AZL | new low | lithium |
| Azure Minerals | AZS | another surge higher | nickel exploration |
| BHP | BHP | fallen to support line | diversified, iron ore |
| Barton Gold | BGD | resuming uptrend | gold exploration |
| Beach Energy | BPT | down | oil and gas |
| Bellevue Gold | BGL | off its highs | gold exploration |
| Benz Mining | BNZ | surging out of downtrend | gold |
| Black Cat Syndicate | BC8 | recapturing uptrend | gold |
| BMG Resources | BMG | down | gold exploration |
| Boab Metals | BML | at resistance line | silver/lead |
| Buru Energy | BRU | sideways | oil |

*This commentary is provided at no charge and in good faith from sources believed to be reliable and accurate. Far East Capital Ltd directors and employees do not accept liability for the results of any action taken on the basis of information provided or for any errors or omissions contained therein. Readers should seek investment advice from their professional advisors before acting on information contained therein. Please see **Disclosure of Conflicts of Interest** at the end of this commentary.*

| | | | | |
|--------------------------------|-----|---------------------------------------|--------------------------------------|------------------------------------|
| Calidus Resources | CAI | ■ | new low | gold |
| Caravel Minerals | CVV | ■ | on support line | copper |
| Carnaby Resources | CNB | ■ | breached support line, down | copper |
| Castile Resources | CST | ■ | still in downtrend | gold/copper/cobalt |
| Celsius Resources | CLA | ■ | rising on takeover bid | copper |
| Cobalt Blue | COB | ■ | risen to resistance line, then slump | cobalt |
| Cyprium Metals | CYM | ■ | suspended | copper |
| Dateline | DTR | ■ | correcting lower | rare earths |
| Ecograf | EGR | ■ | new low | graphite |
| Emerald Resources | EMR | ■ | rising, new high | gold |
| Empire Energy | EEG | ■ | risen to resistance line | gas |
| EQ Resources | EQR | ■ | on support line | tungsten |
| Euro Manganese | EMN | ■ | new low | manganese |
| Evolution Energy | EV1 | ■ | down | graphite |
| Evolution Mining | EVN | ■ | off its highs | gold |
| First Graphene | FGR | ■ | down | graphene |
| Fortescue Metals | FMG | ■ | rising again | iron ore |
| FYI Resources | FYI | ■ | recovered to meet resistance line | HPA |
| Galena Mining | G1A | ■ | at lows | lead |
| Genesis Minerals | GMD | ■ | trying to breach downtrend | gold |
| Genmin | GEN | ■ | testing downtrend | iron ore |
| Gold Road | GOR | ■ | breaching support line | gold |
| Great Boulder Resources | GBR | ■ | sideways to lower | gold exploration |
| Group 6 Metals | G6M | ■ | down | tungsten |
| Hamelin Gold | HMG | ■ | breached uptrend | gold exploration |
| Hastings Technology Metals | HAS | ■ | new low | rare earths |
| Hazer Group | HZR | ■ | testing uptrend | hydrogen |
| Heavy Minerals | HVY | ■ | down | garnet |
| Highfield Resources | HFR | ■ | down | potash |
| Hillgrove Resources | HGO | ■ | rising gently | copper |
| Iluka Resources | ILU | ■ | still at highs | mineral sands |
| ioneer (was Global Geoscience) | INR | ■ | just holding uptrend | lithium |
| Ionic Rare Earths | IXR | ■ | down | rare earths |
| Jervois Mining | JVR | ■ | breached new uptrend | nickel/cobalt |
| Jindalee Resources | JRL | ■ | at lows | lithium |
| Kaiser Reef | KAU | ■ | sideways through downtrend | gold |
| Kalina Power | KPO | ■ | new low | power station additive |
| Krakatoa Resources | KTA | ■ | new low | rare earths |
| Kingfisher Mining | KFM | ■ | off its lows | rare earths |
| Lepidico | LPD | ■ | sideways at lows | lithium |
| Lindian Resources | LIN | ■ | off its highs | rare earths + bauxite |
| Lion One Metals | LLO | ■ | slump | gold |
| Li-S Energy | LIS | ■ | breached downtrend | Lithium sulphur battery technology |
| Los Cerros | LCL | ■ | down | gold exploration |

This commentary is provided at no charge and in good faith from sources believed to be reliable and accurate. Far East Capital Ltd directors and employees do not accept liability for the results of any action taken on the basis of information provided or for any errors or omissions contained therein. Readers should seek investment advice from their professional advisors before acting on information contained therein. Please see **Disclosure of Conflicts of Interest** at the end of this commentary.

| | | | |
|---------------------------|-----|------------------------------------|-------------------------------|
| Lotus Resources | LOT | down | uranium |
| Lucapa Diamond | LOM | down again | diamonds |
| Lunnon Metals | LM8 | testing uptrend | nickel |
| Lynas Corp. | LYC | down | rare earths |
| Mako Gold | MKG | sideways | gold exploration |
| Marmota | MEU | drifting lower | gold exploration |
| Matador Mining | MZZ | down | gold exploration |
| Mayur Resources | MRL | new low, then strong rebound | renewables, cement |
| Meeka Gold | MEK | at lows | gold |
| Megado Gold | MEG | breached uptrend then rebound | rare earths, gold exploration |
| MetalsX | MLX | down | tin, nickel |
| Meteoric Resources | MEI | rising again | rare earths |
| Metro Mining | MMI | rising | bauxite |
| Midas Minerals | MM1 | steeply higher | lithium |
| Musgrave Minerals | MGV | up on takeover approach | gold exploration |
| Nagambie Resources | NAG | down | gold, antimony |
| Neometals | NMT | breached downtrend | lithium |
| Newfield Resources | NWF | down | diamonds |
| Northern Star Res. | NST | testing uptrend | gold |
| Nova Minerals | NVA | collapse on -.3 gpt grade, 9.9 Moz | gold exploration |
| Orecorp | ORR | off its lows | gold development |
| Pacific Gold | PGO | breached short term uptrend | gold exploration |
| Pantoro | PNR | down | gold |
| Panoramic Res | PAN | down | nickel |
| Parabellum Resources | PBL | down | rare earths |
| Patriot Battery Metals | PMT | rising again | lithium |
| Peak Resources | PEK | down | rare earths |
| Peninsula Energy | PEN | rising | uranium |
| Perseus Mining | PRU | down | gold |
| Poseidon Nickel | POS | sideways | nickel |
| Provaris Energy | PV1 | sideways | hydrogen |
| QMines | QML | new low | copper |
| Queensland Pacific Metals | QPM | long term down | nickel/cobalt/HPA |
| FlareX | REE | down | rare earths, phosphate |
| Regis Resources | RRL | uptrend breached | gold |
| Regergen | RLT | breaching steepest downtrend | gas, helium |
| Richmond Vanadium | RVT | sideways | vanadium |
| RIO | RIO | recovery, but within a downtrend | diversified, iron ore |
| Rumble Resources | RTR | secondary downtrend | gold exploration |
| S2 Resources | S2R | sideways | gold exploration |
| Sandfire Resources | SFR | down | copper |
| Santos | STO | softer | oil/gas |
| Sarama Resources | SRR | down to new low | gold exploration |
| Sarytogan Graphite | SGA | down | graphite |

This commentary is provided at no charge and in good faith from sources believed to be reliable and accurate. Far East Capital Ltd directors and employees do not accept liability for the results of any action taken on the basis of information provided or for any errors or omissions contained therein. Readers should seek investment advice from their professional advisors before acting on information contained therein. Please see **Disclosure of Conflicts of Interest** at the end of this commentary.

| | | | | |
|-----------------------------|-----|---|----------------------|-------------------------|
| Siren Gold | SNG |  | new low | gold exploration |
| South Harz Potash | SHP |  | down again | potash |
| Southern Cross Gold | SXG |  | down | gold exploration |
| Southern Palladium | SPD |  | down | PGMs |
| Stanmore Coal | SMR |  | down | coal |
| Strandline Resources | STA |  | down | mineral sands |
| Sunstone Metals | STM |  | down | gold/copper exploration |
| Suvo Strategic Minerals | SUV |  | new low | kaolin |
| Talga Resources | TLG |  | holding support line | graphite |
| Tamboran Resources | TBN |  | sideways | gas |
| Technology Metals | TMT |  | down | vanadium |
| Theta Gold Mines | TGM |  | sideways | gold |
| Thor Mining | THR |  | sideways | gold exploration |
| Tietto Minerals | TIE |  | still down | gold |
| Vanadium Resources | VR8 |  | drifting lower | vanadium |
| Venture Minerals | VMS |  | down | tin, tungsten |
| Vintage Energy | VEN |  | down | gas |
| Voltaic Strategic Resources | VSR |  | off its highs | REO + lithium |
| West African Resources | WAF |  | down | gold |
| West Cobar | WC1 |  | down | rare earth + lithium |
| Westgold Resources | WGX |  | off its highs | gold |
| West Wits Mining | WWI |  | at lows | gold |
| Whitehaven Coal | WHC |  | bouncing off lows | coal |
| Xantippe Resources | XTC |  | down | lithium |
| Zenith Minerals | ZNC |  | down | gold exploration |
| Totals | 20% | 29 | Uptrend | |
| | 55% | 78 | Downtrend | |
| | | 142 | Total | |

Guides to Chart Interpretations

- Charts usually go pass from one trend (up or down) into the other via a period of indecision and uncertainty during which the trend can either recover or change. This period is signified by the orange colour. The orange represent both the greatest risk and greatest reward possibilities.
- Once a chart is in confirmed up or downtrends it is not uncommon for 10-20% of that trend to have already transpired.
- There are trends within trends. The focus of this chart review is the immediate trend that affects the sentiment i.e. it can be a downtrend within a long-term uptrend.
- Not every chart warrants a new comment every week. The new comments are in bold type. Grey type comments may be dated.
- Individual charts provide a single view. It is valuable to look at charts of other companies in similar commodities, and the overall sentiment is also very valuable. Not many stocks can swim against the tide.
- We periodically add or delete charts, some times for obscure reasons. If a chart consistent gives poor signals or is very erratic, we may delete it. Sometimes we add a chart because we want to see what all the fuss is about. We do have a preference for charting stocks that we cover in our research as well.
- Errors and omissions may occur from time to time, especially in fast moving markets.

Amber Lights in Tables: Just a reminder if when the amber light is used in the table – it is when the charts are ambiguous or when there is a change of trend taking place. If a chart is breaching a downtrend it can either be a positive sign or a trap. Only once it has done more work can it be confirmed as a new uptrend. Maybe it is a new uptrend (or conversely a new downtrend); the risk takers can decide to jump on board early (or sell). They will maximise their profits (or minimise their losses if indeed it is the start of the new uptrend (downtrend). More risk-averse investors should wait a little longer, being prepared to give up some of the gains in return for greater certainty.

| Weightings of Sectors Represented in the Company Charts | | | |
|---|------------------|-----------|--|
| Sector | No. of Companies | Weighting | |
| Gold Exploration | 21 | 14.8% | |
| Gold | 21 | 14.8% | |
| Rare Earths | 15 | 10.6% | |
| Oil/Gas | 9 | 6.3% | |
| Nickel | 7 | 4.9% | |
| Copper | 9 | 6.3% | |
| Lithium | 10 | 7.0% | |
| Iron Ore/Manganese | 5 | 3.5% | |
| Graphite/graphene | 5 | 3.5% | |
| Uranium | 5 | 3.5% | |
| Silver | 4 | 40.0% | |
| Tungsten | 3 | 2.1% | |
| Mineral Sands | 2 | 1.4% | |
| Vanadium | 3 | 30.0% | |
| Zinc/Lead | 2 | 1.4% | |
| Coal | 2 | 1.4% | |
| Potash/Phosphate | 2 | 1.4% | |
| Bauxite | 2 | 1.4% | |
| Tin | 2 | 1.4% | |
| Cobalt | 1 | 0.7% | |
| Diamonds | 2 | 1.4% | |
| Other | 10 | | |
| Total | 142 | | |

FEC Disclosure of Interests: It is a requirement of ASIC that holders of AFS licences prominently disclose any conflicts of interest. At all times readers should be aware that Far East Capital Ltd is an active investor. It shares its research and opinions free of charge to other investors and it aims to do so on an ethical basis. Accordingly, when it is writing about stocks in which it holds interests, these will be disclosed. The author is chairman of First Graphene and one of the largest shareholders, through a number of entities. Over the last three years FEC has received capital raising fees from a number of companies but it does not receive payment for research. See individual disclosure notes in the body of the Weekly where they are relevant. Its primary business is investing and managing its own money, but it does occasionally raise money for resource companies.

Disclaimer: This Research Report has been prepared exclusively for Far East Capital clients and is not to be relied upon by anyone else. In compiling this Commentary, we are of necessity unable to take account of the particular investment objectives, financial situation and needs of any of our individual clients. Accordingly, each client should evaluate the recommendations obtained in this Commentary in the light of their own particular investment objectives, financial situation and needs. If you wish to obtain further advice regarding any recommendation made in this Commentary to take account of your particular investment objectives, financial situation and needs, you should contact us. We believe that the advice and information herein are accurate and reliable, but no warranty of accuracy, reliability or completeness is given and (except insofar as liability under any statute cannot be excluded) no responsibility arising in any other way for

errors or omissions or in negligence is accepted by Far East Capital Limited or any employee or agent. For private circulation only. This document is not intended to be an offer, or a solicitation of an offer, to buy or sell any relevant securities (i.e. securities mentioned herein or of the same issuer and options, warrant, or rights with respect to or interests in any such securities). We do not guarantee the accuracy or completeness of the information herein, or upon which opinions herein have been based. At any time we or any of our connected or affiliated companies (or our or their employees) may have a position, subject to change, and we or any such companies may make a market or act as principal in transactions, in any relevant securities or provide advisory or other services to an issuer of relevant securities or any company therewith. Unless otherwise stated all views expressed herein (including estimates or forecasts) are solely those of our research department and subject to change without notice. This document may not be reproduced or copies circulated without authority. Copyright © Far East Capital Ltd 2023.