

Geiger Counter

Supply deficit unsustainable

2018 saw a strong recovery in the uranium price. This has stalled this year, but with the uranium market now in supply deficit, Geiger Counter's (GCL's) managers see the potential for a resurgence in the price as more reactors come online (particularly in China and India), while major producers hold off from reactivating mothballed mines.

An announcement by the Trump administration in July, in relation to its s232 investigation into the uranium security of supply, has created uncertainty for US-based customers (whether there might be import quotas, and which jurisdictions might be treated as domestic – see page 3). This has put a break on purchases and is suppressing the uranium price. However, it is also leading to significant pent-up demand, creating the potential for a sharp reversal once things are clarified. The managers see the current situation as unsustainable.

Capital growth from a diversified global portfolio of uranium stocks

GCL aims to provide investors with capital growth by investing in a portfolio of securities of companies involved in the exploration, development and production of energy, as well as related service companies. Its main focus is the uranium sector, but up to 30% of assets can be invested in other resource-related companies. These include, but are not limited to, shares, convertibles, fixed-income securities and warrants.

Year ended	Share price total return (%)	NAV total return (%)	URAX Index total return (%)	Cameco share price total return (%)	Global X Uranium ETF total return (%)
31/10/15	(34.5)	(33.2)	(36.7)	(13.5)	(33.3)
31/10/16	35.7	26.3	35.3	(29.3)	3.3
31/10/17	(7.9)	(16.7)	2.5	0.1	(9.2)
31/10/18	17.1	17.7	18.0	38.4	4.7
31/10/19	(20.0)	(32.4)	(0.9)	(17.4)	(10.8)

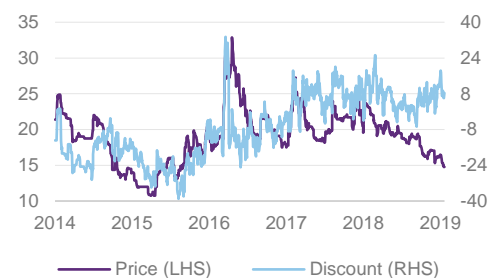
Source: Morningstar, Marten & Co

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Sector	Sector specialist – commodities and natural resources
Ticker	GCL LN/GCS LN
Base currency	GBP
Price	14.75p
NAV	13.55p
Premium/(discount)	8.1%
Yield	Nil

Share price & discount (ords.)

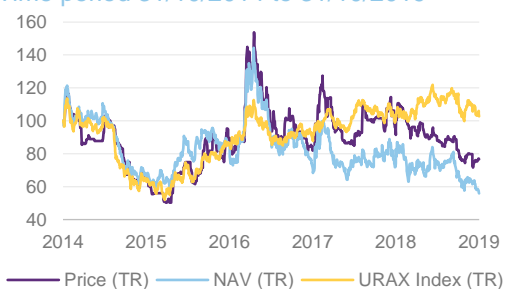
Time period 31/10/2014 to 18/11/2019



Source: Morningstar, Marten & Co

Performance over 5 yrs (ords.)

Time period 31/10/2014 to 31/10/2019



Source: Morningstar, Marten & Co

Domicile	Jersey
Inception date	7 October 1994
Manager	Keith Watson and Robert Crayford
Market cap (ord/sub)	12.2m/0.6m
Shares outstanding (ord/sub)	83.0m/38.0m
Daily vol. (1-yr. avg.) (ord/sub)	153.8k shares/ 26.8k shares
Net gearing	23.3%

[Click here for our initiation note](#)

Market outlook

Our March 2019 initiation note provided a detailed overview of the outlook for the global uranium market (see pages 5 to 8 of that note) and we would recommend readers review this. However, to recap:

- Power production is the key driver of the long-term uranium price on the demand side (more than of 99% of uranium produced is used to produce fuel for nuclear power plants).
- Demand for uranium tends to be price-inelastic, at least in the short-to-medium term (nuclear power plants are high-capital-expenditure, long-term investments, with uranium supply typically tied to long-term contracts. This, and the fact that nuclear power stations are expensive to ramp up and down, makes demand insensitive to price in the near term).
- Concentrated production leaves the market open to supply side shocks (the top nine uranium producers collectively control around 85% of production globally, whilst over 40% of production is located in regions of some geopolitical risk – primarily Kazakhstan and Russia).
- There are significant supply-demand imbalances in the market (for example, the US accounts for around 3% of primary uranium supply but represents around 30% of global demand). The aftermath of the 2007 flooding of Cameco's Cigar Lake mine saw a major spike in the uranium price.
- The industry is also exposed to demand risks (as illustrated by the aftermath of the March 2011 Fukushima Daiichi disaster). This occurred as Kazakhstan was nearing the end of a five-year development programme that nearly quadrupled its uranium output. Japan instantly shut all its reactors, prompting an industry-wide safety review across the globe, denting demand from the developed world and creating a significant supply imbalance.
- The subsequent poor pricing environment has choked off uranium supply (as more expensive projects have been taken out of production) and curtailed capital investment. Data from Uranium Participation Corporation suggests that supply close to 35 million lbs per annum has been removed from the uranium market since 2016.
- Despite its issues, nuclear power has a key advantage in that it is a clean technology that does not emit CO₂ into the atmosphere in an increasingly carbon-conscious world. It is also an established technology that can provide a consistent supply 24 hours a day, whatever the weather, making it suitable for baseload power in a way that other low carbon technologies, such as solar, wind or tidal generation, are perhaps not.

Current situation is not sustainable

There is evidence to suggest that the current situation is not sustainable over the longer term. Specifically:

- In Japan, Abe's pro-nuclear government (re-elected in September 2018) has seen it slowly switching its reactors back on (although there has been a recent pause).
- The US government is now offering nuclear plants a zero-emission credit in recognition of their zero carbon emissions. This helps to level the playing field against renewables and fossil-fuelled generation.

- Having faced government proposals to close them, South Korea and Taiwan have now voted to retain their nuclear power stations.
- France has extended its time frame for de-emphasising nuclear within its power mix (it was targeting a reduction to 50% by 2025 but this has been extended by 10 years to 2035).
- Higher-priced long-term supply contracts to utilities are also running off rapidly. This is forcing a market rebalancing as mine supply is curtailed and in some cases utility supply contracts are being fulfilled by U₃O₈ purchased in the market, as is the case with Cameco.

Lack of clarity over allowable jurisdictions has stalled demand for uranium in the short term

Section 232 investigation request asked for import quotas (a minimum of 25% of uranium be met by US producers).

Trump administration has not imposed quotas but it says that a fuller analysis of the security implications is required.

Section 232 investigation suggests that nuclear continues to be seen as part of the long-term power mix.

In recognition of the concentration of uranium supply outside the US, the US government initiated a section 232 investigation into the security of supply (US section 232 investigations look at the effects of imports on national security). UR-Energy USA and Energy Fuels Resources, the companies that made the original submission that led to the investigation, requested that the Trump administration impose an import quota requiring that 25% of domestic uranium consumption be met by US producers.

On 12 July 2019, the Trump administration issued a memorandum saying that it did not agree that uranium imports threaten to impair the national security of the United States, but that the Secretary of Commerce's findings raised significant concerns regarding the impact of uranium imports on the national security with respect to domestic mining. The announcement said that "a fuller analysis of national security considerations with respect to the entire nuclear fuel supply chain is necessary at this time".

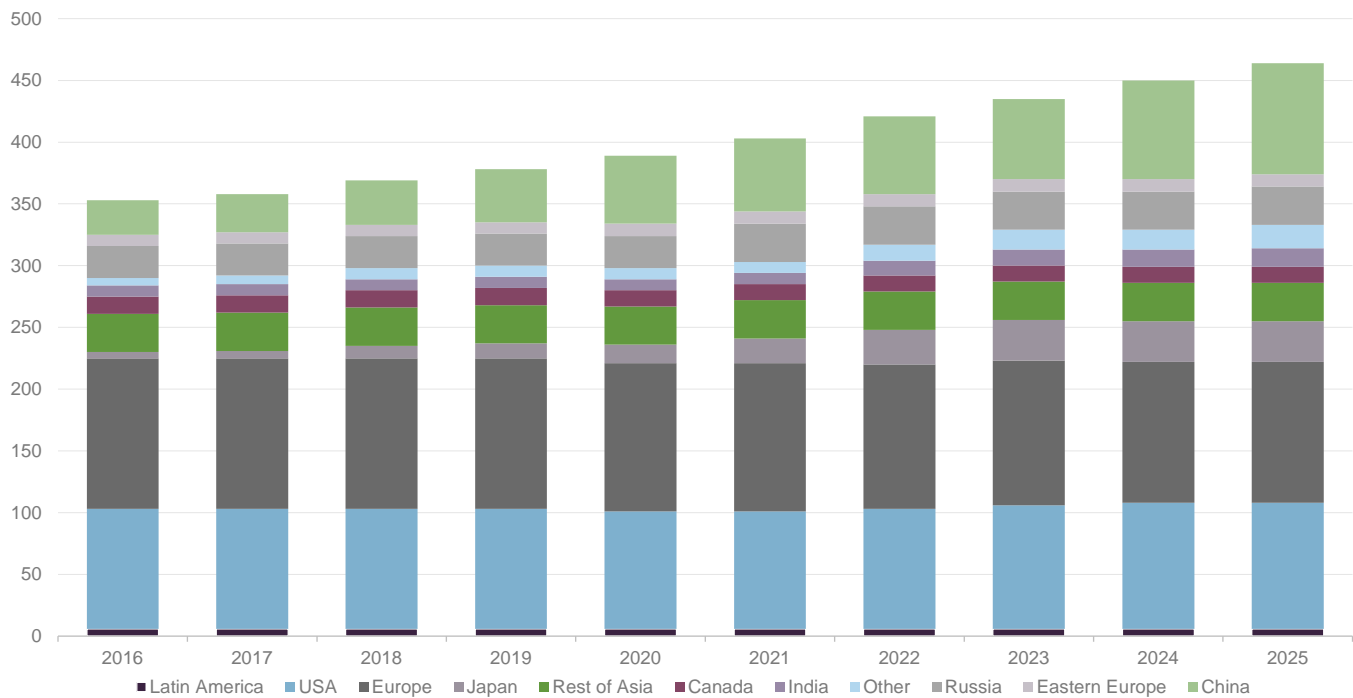
The fact that the US government initiated the investigation suggests that nuclear continues to be seen as part of the long-term power mix, despite the advent of cheap shale gas. Furthermore, although no quota has been imposed as yet, the results of the fuller analysis are yet to be determined and this has led to concerns for US-based purchasers as to whether a quota could still be imposed and, if so, what might be classed as domestic production (for example, it is unclear how purchases from Canadian producers might be treated). GCL's managers say that, while the market has otherwise moved to a supply deficit, this uncertainty has put a break on purchases and is suppressing the uranium price. However, this is leading to significant pent-up demand and could lead to a sharp reversal as the situation is clarified and unwinds.

Managers' view

The fundamentals of the uranium industry are showing a marked shift in fortunes.

GCL's managers maintain their view that the fundamentals of the uranium industry are showing a marked shift in fortunes following a 10-year bear market, with 2018 marking the point when uranium supply-demand fundamentals swung from surplus to deficit. The extended bear market period has left the valuations of underlying mining equities at extremely attractive levels, in their opinion. The main surprise, since we published our initiation note, has been the additional uncertainty created by the Trump administration's response to the section 232 investigation into the security of uranium supply (discussed above).

Figure 1: Global nuclear operating capacity (GW)



Source: CQS

The manager's view was set out in detail in our initiation note (see pages 8 to 10 of that note), and we would recommend readers review this. However, to recap:

- Emerging markets are driving demand growth, particularly in China. Global nuclear operating capacity is expected to expand from around 350 gigawatts (GW) in 2016 to around 465GW by 2025 (an increase of 33%). Emerging markets are driving this expansion (developed markets are generally flat or down) with China, India and Russia at the forefront.
- Declines in North American and Western European nuclear generation capacity are expected to be more than offset by the Asian build-out.
- This new nuclear generation is generally displacing polluting coal fired power generation, driven by the need to improve air quality. Figure 1 provides an illustration of the anticipated growth trajectory.
- The market's rapid shift to deficit production has seen production cuts by major producers such as Kazakhstan and Cameco. Both have stated the need for materially higher pricing before increasing output. Data from Uranium Participation Corporation suggests that by 2021, approximately 20% of demand will be uncovered, increasing to approximately 50% in 2025 and 65% by 2030 and beyond. The managers think that this is unsustainable and will drive a continued recovery in the uranium price.
- Current uranium prices are considerably below the levels required to incentivise new supply. Furthermore, current market uncertainties are making it difficult for new projects to advance.
- Nuclear power generation is capex-intensive, with uranium only constituting a small proportion of the cost per KWh. This results in a very low elasticity of demand to pricing with a greater strategic emphasis being placed on certainty of supply.
- The managers believe that renewables are unable to displace this portion of the global power supply primarily due to their higher output variability.
- Although there is limited clarity on timing, the programme of nuclear reactor restarts in Japan – whilst slow to get going – should also increase demand for uranium.

There has been a pause this year, the managers expect the pace to pick up. Five reactors were restarted during 2018, whilst only four had previously restarted since the Fukushima Daiichi disaster and, with some 54 reactors in total, there are many more to come back online.

- The performance of uranium equities and the spot price appear to have disconnected, with equities lagging. The managers see the potential for a strong recovery in equities as the market regains confidence. The managers also believe that many investors feel that they do not need to have an allocation to uranium and, with the uranium price recovery stalling this year, many have turned away from the sector. However, the managers believe that a virtuous circle of increased investor interest driving equity prices, as the uranium price recovers, is a distinct possibility.

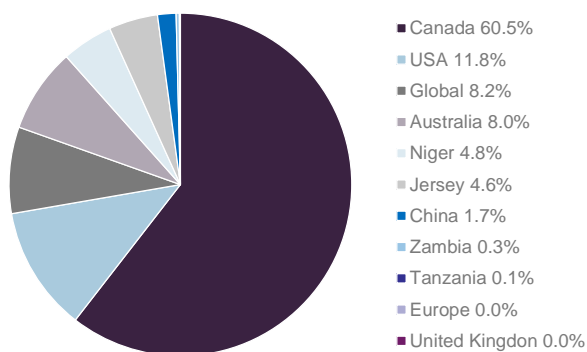
Asset allocation

GCL's portfolio is highly concentrated.

As at 30 September 2019, GCL's portfolio had exposure to 46 issues, up from 42 issues as at 30 November 2018 (the most recently available data when we last published). GCL's portfolio is highly concentrated (the top five holdings continue to account for around 55% of the fund – see Figure 6) and to protect the company from being unduly exposed to arbitrageurs, details of its holdings are limited to the top five largest positions in its monthly factsheets. Greater detail is provided in its annual and interim reports, some of which has been utilised in the charts and tables below, but this data is inevitably more dated by the time these reports are released.

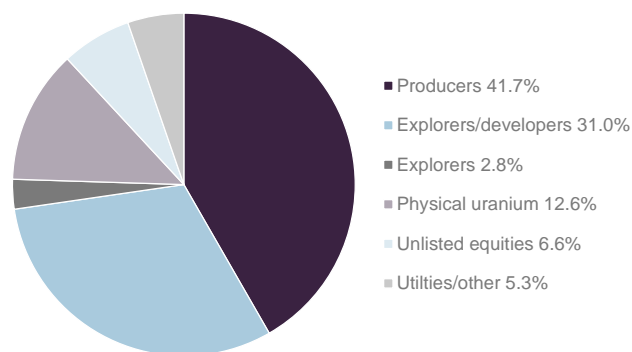
Concentrated and low turnover portfolio of uranium stocks

Figure 2: Portfolio geographic allocation as at 31 March 2019



Source: Geiger Counter, Marten & Co

Figure 3: Portfolio sectoral allocation as at 30 September 2019



Geiger Counter, Marten & Co

GCL's portfolio is inherently low turnover.

As illustrated in Figure 6, the top five issues accounted for 54.9% of the portfolio as at 30 September 2019, which is a modest increase from when we last wrote (53.3% as at the end of November 2018). This increase reflects both the performance of some of GCL's larger positions as well as the reinvestment of proceeds from the sales of Greenland Minerals and Alkane Resources (both strong performers – see below) into GCL's largest holding NexGen Energy, which has underperformed (see page 9). In part reflecting the managers' investment style, but also reflecting the concentrated nature of the industry (nine producers control around 90% of supply between them), GCL's portfolio is inherently low-turnover. Four of the top five holdings at the end of September 2019 comprised the same five stocks that held the top five positions as at the end of

November 2018 (the most recently available data when we published our initiation note), albeit in a slightly different order.

Figures 2 and 3 show the portfolio's geographical allocation and sectoral allocations as at 30 September (this being the most recent publicly available data). These highlight a number of themes:

- Whilst GCL has a global mandate, North America (particularly Canada) and Australia dominate the portfolio. These are viewed as politically safer regions that have 'extractable pounds'; that is, they have good geology and mining-friendly environments.
- Over half of GCL's portfolio continues to be invested in safer assets; i.e. producers or companies backed by physical uranium.
- Pure exploration plays are a limited component of the portfolio.

GCL's portfolio has a strong bias towards small and mid-cap uranium mining companies.

Although not illustrated in Figures 2, 3 and 6, GCL's portfolio continues to have a strong bias towards small and mid-cap uranium mining companies. For example, GCL does have an investment in Cameco, but this accounted for some 2.6% of net assets as at the end of March 2019 (down from 4.7% as at the end of September 2018). The bias towards small and mid-cap companies reflects the managers' view that these generally have superior growth prospects (for example, production improvements or improvements in reserves) and, generally being less well-researched, it is also where the managers are more likely to find a mispriced security.

As at 31 March 2019, GCL had five unlisted investments, which accounted for 6.2% of its net assets (up from four investments that accounted for 5.5% as at the end of September 2018). It also held five warrants (up from three), which accounted for 1.7% of net assets (previously all of the three that were held were at nil value).

As discussed above, GCL has a significant exposure to physically backed uranium entities through its holdings in Uranium Participation Corporation and Yellow Cake Plc. However, in comparison to alternatives such as the URA ETF, GCL is relatively underweight Cameco.

Greenland Minerals – beneficiary of Trump tweet

Figure 4: Greenland Minerals share price (AUD)



Source: Bloomberg

Greenland Minerals (www.ggg.gl), formerly Greenland Minerals and Energy Limited, is an Australian company whose primary focus is the development of the Kvanefjeld rare earth project in south west Greenland. This project, which is centred on the Ilimaussaq alkaline complex, is the only major mining project in Greenland, and is thought to be one of the world's biggest undeveloped resources of rare earth elements (it measures approximately 8km x 15km). The company claims that the field "is positioned to be a future cornerstone to global rare earth supply" and that, when developed, "will be a large-scale, low-cost, long-term supplier of products which are at the centre of the unfolding revolution in the efficient use of energy".

The company has seen strong share price performance this year and, following a small retrenchment, benefitted following Donald Trump's (in)famous tweet that he wanted to buy Greenland. Although this is Greenland's only major project, the country's mineral wealth has made it of interest to other mining companies, particularly as global warming has seen a retrenchment of the ice sheets that cover much of the country, thereby making these resources more accessible. In this instance, Greenland Minerals would be an obvious takeover candidate.

While they continue to like the company, GCL's managers felt that, following President Trump's tweet, the share price had increased to a level whereby it was factoring in an

unduly positive outlook. They therefore took the opportunity to sell down the position into market strength.

Alkane Resources – uplift following Boda prospect drilling results

Figure 5: Alkane Resources price (AUD)



Source: Bloomberg

Alkane Resources (www.alkane.com.au) describes itself as “a gold production company with a multi-commodity exploration and development portfolio”. Its projects are located predominantly in the Central West region of New South Wales, in Australia, but extend throughout the country.

The company’s share price saw a significant uplift in September following the announcement of drilling results that recorded the discovery of significant porphyry gold-copper mineralisation at the company’s Boda Prospect (located within its Northern Molong Porphyry Project) in New South Wales. GCL’s managers say that the company’s small gold project has also benefitted from an increasing gold price. The effect of the share price increase was to move the position from being a circa 0.5% position to around a 2.5% position, and the managers considered it prudent to sell down the position and reinvest the proceeds in better-value names.

Top five holdings

Since we last published, Fission Uranium has moved out of GCL’s top five holdings to be replaced by NAC Kazatomprom. These moves do not reflect specific action by the manager, rather the relative performance of these holdings during the period since we last published. Details of the rationale underlying the remaining top five positions, along with that of Fission Uranium, can be found in our initiation note (see page 11 of this note). For example, readers who would like more detail on NexGen Energy, Denison Mines, UR-Energy and Uranium Participation should see pages 13–15 of our March 2019 initiation note. An update on NexGen Energy has also been provided in the performance section (see page 9).

Figure 6: Top five holdings as at 31 January 2019

Holding	Sector	Geography	Allocation 31 Jan 19 (%)	Allocation 31 Jan 19 (%)	Change (%)
NexGen Energy	Exploration and development	Canada	18.5	15.3	3.2
Denison Mines	Exploration and development	Canada	10.8	9.8	1.0
UR-Energy	Uranium mining	US	9.3	12.1	(2.8)
NAC Kazatomprom	Uranium mining	Kazakhstan	8.6	8.8	(0.2)
Uranium Participation	Holding company	Canada	7.7	8.1	(0.4)
Total of top 5			54.9	53.3	1.6

Source: Geiger Counter, Marten & Co

Figure 7: NAC Kazatomprom share price (USD)



Source: Bloomberg

NAC Kazatomprom (8.6%) - resilient share price

NAC Kazatomprom (www.kazatomprom.kz/en) is the world’s largest uranium producer; its production accounts for 35-40% of global uranium supply (this includes production attributable to its joint-venture partners, although Kazatomprom typically owns at least 50% of such projects). A Kazakhstan SOE, Kazatomprom describes itself as the national operator for the import and export of uranium, rare metals, nuclear fuel for nuclear power plants. Crucially, Kazakhstan has extensive uranium reserves and Kazatomprom has priority rights to these. While GCL’s managers like the company, they have not been actively trading the position. The move up GCL’s rankings is largely

a consequence of Kazatomprom’s share price proving to be more resilient than some of GCL’s other holdings, arguably reflecting the scale of its operations.

Performance

Figure 8: GCL NAV performance relative to the URAX Index – rebased to 100 over five years to 31 October 2019



Source: Morningstar, Marten & Co.

[Please click here to visit QuotedData.com for a live comparison of the commodities and natural resources peer group.](#)

As discussed in our initiation note, GCL and the broader uranium market suffered heavily in the aftermath of the Fukushima Daiichi disaster, as the world’s focus shifted away from nuclear power as a low-carbon solution (see pages 6 and 7 of that note for more discussion). However, as capacity has been taken out of the market and the spot price has recovered, the fortunes of the sector have improved, albeit with periods of marked volatility. As discussed on page 3, and illustrated below in Figures 8 and 9, the last 12 months have been surprisingly challenging for the sector, particularly given the backdrop of the uranium market moving into supply deficit. Uncertainty for purchasers of uranium in the US, following the administration’s announcement following the S232 investigation, is suppressing demand and the uranium price for now, but there could be a sharp reversal as these seemingly-deferred purchases reach the market.

Figure 9: Cumulative total return performance to 31 October 2019 (all in sterling terms)

	1 month (%)	3 months (%)	6 months (%)	1 year (%)	3 years (%)	5 years (%)	10 years (%)
GCL NAV	(11.9)	(19.5)	(25.6)	(32.4)	(33.7)	(44.1)	(79.4)
GCL share price	(3.8)	(6.8)	(12.8)	(20.0)	(13.7)	(23.3)	(77.5)
URAX	(6.8)	(11.9)	(8.9)	(0.9)	19.9	2.7	(45.6)
Cameco	(10.7)	(8.5)	(18.3)	(17.4)	14.4	(30.1)	(51.5)
Global X Uranium ETF	(6.1)	(7.0)	(9.6)	(10.8)	(15.2)	(41.6)	N/A**

Source: Morningstar, Marten & Co. *Note: GCL does not have a formal benchmark. The URAX Index, the share price of Cameco and the Global X Uranium ETF are included purely for performance comparison purposes. **Note: The Global X Uranium ETF was established in November 2010 and does not yet have a 10-year track record.

A significant detractor during the last 12 months has been NexGen Energy (see discussion below), which has been GCL’s largest holding during this period (for example, NexGen accounted for 16.8% of GCL’s portfolio as at 30 September 2018 and 18.5% as at 30 September 2019). NexGen has seen its share price fall by 40.4%

during the last 12 months (as at 19 November 2019) and as a major component of the portfolio, this has been a significant drag on GCL’s performance.

NexGen Energy (18.5%) – market’s expectations beatable

Figure 10: NexGen Energy share price (CAD)



Source: Bloomberg

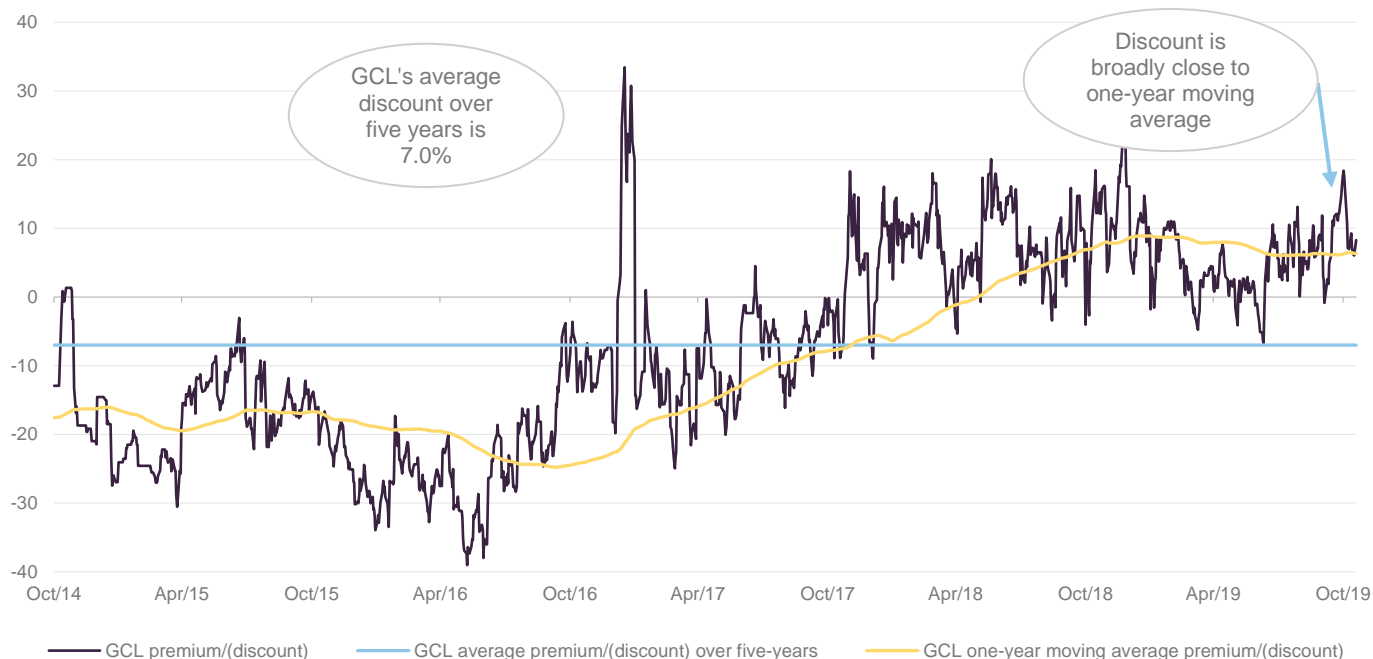
As discussed in our initiation note (see page 13 of that note), NexGen Energy (www.nexgenenergy.ca) is a uranium exploration and development company with a portfolio of projects that are centred on the Athabasca Basin in Canada. Its Athabasca Rook 1 property hosts the Arrow Deposit, the South Arrow discovery, the Harpoon discovery, the Bow discovery and the Cannon area, all of which are 100% owned by NexGen. GCL’s managers say that the arrow project is incredibly high-grade (typically 10–20x similar projects) and so much better recoveries are achievable.

As illustrated in Figure 10, NexGen has suffered from significant share price weakness during the last 12 months. The managers felt that much of this weakness was technically led, rather than being based on company fundamentals. Share price weakness saw NexGen moved out of the YSX Composite Index (its market capitalization had dropped below the minimum required), prompting the sale of 12m shares by ETFs. This pushed NexGen’s share price down further and GCL’s managers took the opportunity to increase their holding in NexGen.

GCL’s managers like NexGen’s assets, its management team and its financial strength. They consider that NexGen is well positioned to bring the Arrow Deposit into production and are confident that the timeline expectations of the market are beatable by NexGen.

Premium/(discount)

Figure 11: Premium/(discount) over GCL five years



Source: Morningstar, Marten & Co.

GCL has predominantly traded at a premium during the last two years.

GCL has previously issued stock while it has been trading at a premium, which is beneficial to existing shareholders.

GCL does not have an explicit discount management policy and has not undertaken any repurchases to date.

Further information on GCL can be found at the manager's website: ncim.co.uk

The manager seeks securities that are undervalued by the market.

As illustrated in Figure 11, having previously traded at a discount, GCL has predominantly traded at a premium during the last two years, albeit with marked volatility in the premium/discount. The tightening during 2016 and 2017 coincided with a recovery in the broader uranium market as supply conditions tightened, the uranium price recovered, and sentiment improved.

GCL has previously issued stock when it has been trading at a premium (stock was last issued in December 2018 at a premium of around 11%). With the recent expansion of the premium, this may be possible again. We reiterate that this is beneficial to existing shareholders, as it should – all things being equal – support liquidity and lower GCL's ongoing charges by spreading its fixed costs over a larger asset base.

GCL's premium is in marked contrast to the broader natural resources sector, which was trading at an average discount of 25.4% as at 18 November 2019, but this reflects GCL's narrow focus and the resurgence of interest in the uranium market. During the last 12 months, GCL has traded between a discount of 6.7% and a premium of 25.2%, with an average premium of 6.4%.

GCL does not have an explicit discount management policy, but it is authorised to repurchase up to 14.99% and allot up to 10% of its issued share capital, which gives the board a mechanism with which it can influence the premium/discount. However, whilst it has used its authorities to moderate the premium, GCL has not made any repurchases to date. This is reasonable in our view, given its size. We think that share repurchases might have a limited impact on the discount as they would also serve to reduce liquidity and put upward pressure on GCL's ongoing charges ratio (i.e. reversing the benefits of growing GCL, as discussed above). We continue to believe that GCL is better served by focusing its efforts on increasing awareness of GCL among investors.

Fund profile

Diversified global uranium exposure

GCL aims to provide investors with attractive returns, primarily in the form of capital growth, by investing in a portfolio of securities of companies involved in the exploration, development and production of energy and related service companies in the energy sector. Its main focus is uranium, but in order to allow for some diversification beyond this highly concentrated sector, up to 30% of assets can be invested in other resource-related companies.

As discussed below, GCL does not have a formal benchmark and is not managed with the aim of providing outperformance relative to an index. Instead, the portfolio is managed with a more absolute return mindset, with the managers selecting the securities that they believe will provide the best risk-adjusted returns over the longer term. Although the managers consider uranium to benefit from long-term structural growth drivers, the portfolio is focused on securities that the manager has identified as being undervalued by the market. The expectation is that such securities will benefit from a re-rating over time, and therefore provide the scope for a capital appreciation beyond what the market expects.

GCL has a global remit but its portfolio tends to be biased towards North American- and Australian-listed equities. The portfolio is predominantly invested in equities, but it is not restricted to these and can also invest in convertible securities, fixed-income securities and warrants.

NCIM has managed GCL since its launch in July 2006.

CQS Group and New City Investment Managers

New City Investment Managers (NCIM) has been GCL's investment manager since its launch in July 2006. On 1 October 2007, NCIM joined the CQS Group, a global diversified asset manager running multiple strategies with AUM of US\$18.5 billion as at 31 October 2019. Keith Watson and Rob Crayford are responsible for the day-to-day management of GCL's portfolio.

This note includes comparisons against Cameco...

No formal benchmark index

Reflecting both its specialist investment proposition and a relatively small universe, GCL does not have a formal benchmark. However, for the purpose of performance evaluation, the manager has traditionally made comparisons against the price of Cameco, the URAX Index and the spot price of triuranium octoxide (U_3O_8 – the most stable uranium compound and consequently one of the more popular forms of the product).

Cameco is the largest listed uranium producer in the world and the second-largest uranium producer globally. It also provides the processing services needed to produce fuel for nuclear power plants. Cameco has a Canadian listing and its share price and the associated total return series are readily available, so this has been included in this report.

Comparisons against the spot price of U_3O_8 have not been included in this note. Whilst a potentially useful comparator, visibility of the U_3O_8 spot price reduced dramatically from June 2017 onwards, making it much harder for market practitioners to observe and, in our opinion, reducing its relevance. An additional concern regarding the validity of the U_3O_8 spot price, for the purposes of performance comparison, is that the majority of market practitioners cannot invest directly in this commodity.

... the URAX Index, and ...

This note also includes comparisons versus the URAX Index. This index consists of the 10 largest global companies operating in the fields of uranium mining or processing. It is constructed by Société Générale Index and aims to reflect the development of the uranium mining and processing sectors. Index components are ranked according to their free float market capitalisation and market liquidity. They are re-weighted on a quarterly basis, each to a minimum of 5% and a maximum of 15%.

... the Global X Uranium ETF.

Finally, the Global X Uranium ETF (URA) has also been used as a comparator in this note. This is a reasonably large (net assets of around US\$192.1 million as at 19 November 2019) and liquid ETF that provides investors with access to a broad range of companies involved in uranium mining and the production of nuclear components (this includes companies involved in extraction, refining, exploration, or manufacturing of equipment for the uranium and nuclear industries). Its objective is to provide investment results that correspond generally to the price and yield performance, before fees and expenses, of the Solactive Global Uranium & Nuclear Components Total Return Index.

Previous publications

Readers interested in further information about GCL, such as investment process, fees, capital structure, life and the board, may wish to read our initiation note [***"Nuclear exposure"***](#), published on 20 March 2019. You can read the note by clicking on the link or by visiting our website.

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