

# Geiger Counter

## Nuclear exposure

Geiger Counter (GCL's) managers see the potential for further recovery in the uranium price, as more reactors come on line (particularly in China and India, where governments are keen to reduce CO2 emissions) while major producers hold off from reactivating mothballed mines. This should help broaden the recovery in uranium stocks beyond just the majors, benefitting GCL's portfolio and potentially allowing it to make up recent underperformance. The managers note that uranium is emerging from a 10-year bear market which has left valuations of uranium miners at attractive levels.

## 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 (%)
28/02/15	(39.7)	(25.5)	(25.9)	(29.8)	(33.8)
28/02/16	(27.6)	(31.9)	(37.2)	(10.9)	(36.6)
28/02/17	106.4	77.4	61.3	5.5	48.6
28/02/18	(28.6)	(39.9)	(2.8)	(25.8)	(31.3)
28/02/19	0.0	0.4	11.2	37.2	1.0

Source: Morningstar, Marten & Co

<b>Sector</b>	Sector specialist – commodities and natural resources
<b>Ticker (ord/sub)</b>	GCL LN/GCS LN
<b>Base currency</b>	GBP
<b>Price (ord)</b>	19.60p
<b>NAV (ord)</b>	18.69p
<b>Premium/(discount)</b>	4.9%
<b>Yield</b>	Nil

## Share price and discount (ords.)

Time period 28/2/2014 to 15/3/2019



Source: Morningstar, Marten & Co

## Performance over 5 yrs (ords.)

Time period 28/2/2014 to 28/2/2019



Source: Morningstar, Marten & Co

<b>Domicile</b>	Jersey
<b>Inception date</b>	7 October 1994
<b>Manager</b>	Keith Watson and Robert Crayford
<b>Market cap (ord/sub)</b>	16.3m/1.9m
<b>Shares outstanding (ord/sub)</b>	83.0m/37.5m
<b>Daily vol. (1-yr. avg.) (ord/sub)</b>	207.3k shares/ 32.8k shares
<b>Net gearing</b>	22.2%

## Contents

<b>4</b>	<b>Fund profile</b>
4	Diversified global uranium exposure
4	CQS Group and New City Investment Managers
4	No formal benchmark index
<b>5</b>	<b>Market outlook</b>
5	Uranium demand driven by power production
5	Concentrated production leaves market open to supply-side shocks
6	Fukushima Daiichi disruption
7	Poor pricing environment has curtailed capital investment and led to production cuts
<b>8</b>	<b>Manager's view</b>
9	Emerging markets are driving demand growth, particularly in China
10	Supply cuts have put the market into deficit
10	Uranium equities have disconnected from the uranium price
<b>10</b>	<b>Bottom-up investment process coupled with a top-down macro-overlay</b>
11	Comprehensive programme of resource company meetings coupled with extensive fundamental analysis
11	Macro analysis guides managers research efforts
11	Portfolio construction – unconstrained by benchmark
12	Investment restrictions
<b>12</b>	<b>Asset allocation</b>
12	Concentrated and low turnover portfolio of uranium stocks
<b>13</b>	<b>Top five holdings</b>
13	NexGen Energy (15.3%)
14	UR-Energy (12.1%)
14	Denison Mines (9.8%)
14	Uranium Participation (8.1%)
15	Fission Uranium (7.9%)
<b>15</b>	<b>Performance</b>
<b>16</b>	<b>Peer group</b>
<b>18</b>	<b>No dividend – capital growth focused</b>
<b>18</b>	<b>Premium/(discount)</b>
<b>19</b>	<b>Fees and costs</b>
19	Fund administration services
19	Allocation of fees and costs
<b>20</b>	<b>Capital structure and life</b>
20	Subscription shares
20	Borrowing facility
20	Unlimited life with an annual continuation vote

## Contents (continued)

20	Major shareholders
21	Financial calendar
21	Corporate history
21	<b>Management team</b>
21	Keith Watson
21	Robert (Rob) Crayfourd
21	<b>Board</b>
22	George Baird (chairman)
22	Gary Clark (chairman of the audit and risk committee)
23	James Leahy (director)
23	Richard Lockwood (director)

## Fund profile

### Diversified global uranium exposure

Further information on GCL can be found at the manager's website: [ncim.co.uk](http://ncim.co.uk)

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, to allow for some diversification beyond this highly concentrated sector, up to 30% of assets can be invested in other resource-related companies.

The manager seeks securities that are undervalued by the market.

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.

### CQS Group and New City Investment Managers

NCIM has managed GCL since its launch in July 2006.

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\$18.4 billion as at 28 February 2019. Keith Watson and Rob Crayford are responsible for the day-to-day management of GCL's portfolio.

### 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).

This note includes comparisons against Cameco...

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<sub>3</sub>O<sub>8</sub> 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\$262 million) 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.

## Market outlook

### Uranium demand driven by power production

More than 99% of uranium produced is used to produce fuel for nuclear power plants.

According to Natural Resources Canada, more than of 99% of uranium produced is used to produce fuel for nuclear power plants (other uses include the production of medical isotopes and fuel for research reactors). Power production is therefore the key driver of the long-term uranium price on the demand side.

Demand for uranium tends to be price inelastic in the short to medium term.

Nuclear power plants are high capital expenditure (Capex), long-term investments, with uranium supply typically tied to long-term contracts. Given this, and the fact that nuclear power stations are expensive to ramp up and down, demand for uranium tends to be price-inelastic, at least in the short to medium term.

### Concentrated production leaves market open to supply side shocks

The top nine uranium producers collectively control around 85% of production globally.

Uranium is reasonably abundant within the earth's crust and, whilst it may require additional permitting and be subject to additional regulation when compared to other commodities, it is not technically difficult to mine. Uranium processing is heavily regulated, but mining permitting is not unduly onerous. However, as illustrated in Figures 2 and 3, uranium production is highly concentrated. The top nine producers collectively control around 85% of production, whilst over 40% of production is located in regions of geopolitical risk (primarily Kazakhstan and Russia).

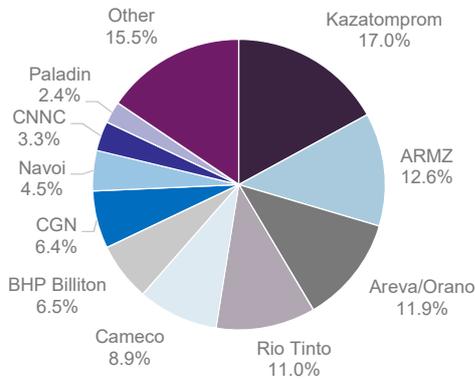
The concentration of production in specific regions, companies and mines leaves the uranium market vulnerable to supply-side shocks. This is particularly apparent when supply-demand imbalances are taken into account. For example, the US accounts for around 3% of primary uranium supply, but represents around 30% of global demand. The 2007 flooding of Cameco's Cigar Lake illustrates the potential impact from supply disruption, as illustrated in Figure 1, in the price rise experienced at the time.

Figure 1: Spot uranium price 2000 - 2018



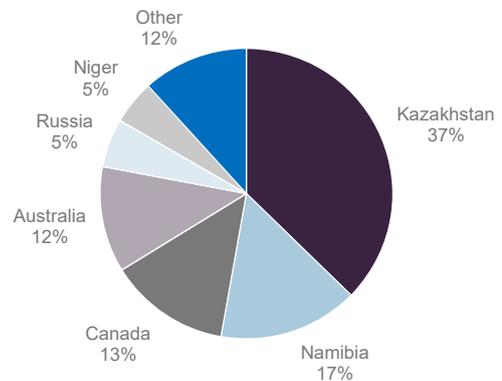
Source: Kazatomprom National Atomic Company Prospectus of 15 October 2018.

Figure 2: Global uranium production by company as at February 2018



Source: UXC, BMO

Figure 3: Global uranium production by country as at February 2018



Source: UXC, BMO

### Fukushima Daiichi disruption

Nuclear generation does not emit CO<sub>2</sub> and so is a useful tool in the battle against climate change.

The March 2011 Fukushima incident illustrates that there are also potential demand risks. Occurring just as Kazakhstan was nearing the end of a five-year industry development programme that nearly quadrupled the nation's uranium output, demand disruption from Fukushima, as Japan shut all its reactors prompting an industry wide safety review, created a significant supply imbalance.

While it may not top an environmentalist's lists of preferred power generation sources, nuclear power has a key advantage in that it is a clean technology that does not emit CO<sub>2</sub> into the atmosphere in an increasingly carbon-conscious world. Moreover, it is an established technology that can provide a consistent supply 24 hours a day, whatever

the weather. This makes it suitable for baseload power in a way that other low carbon technologies, such as solar, wind or tidal generation are perhaps not.

Fukushima Daiichi saw developed markets retreat from nuclear generation.

There was an emerging consensus that traditional nuclear power would need to take a greater role in meeting the world's energy requirements, if carbon levels were to be reined in. This is particularly the case in emerging and frontier markets whose energy needs multiply as they develop (developed markets' energy requirements tend to be more stable). The Fukushima Daiichi disaster in March 2011 disrupted this consensus, particularly in the developed world. Germany, for example, shut down eight of its 17 reactors and committed to closing the rest by 2022. In the US, a nuclear energy renaissance was taking place, but this gave way to a climate of net closures. Japan, traditionally a major user of nuclear power due to its limited supply of oil and similar alternatives, took all of its nuclear power stations offline by May 2012. France also announced plans to scale back its nuclear power production.

This led to over-supply and a marked fall in the uranium price.

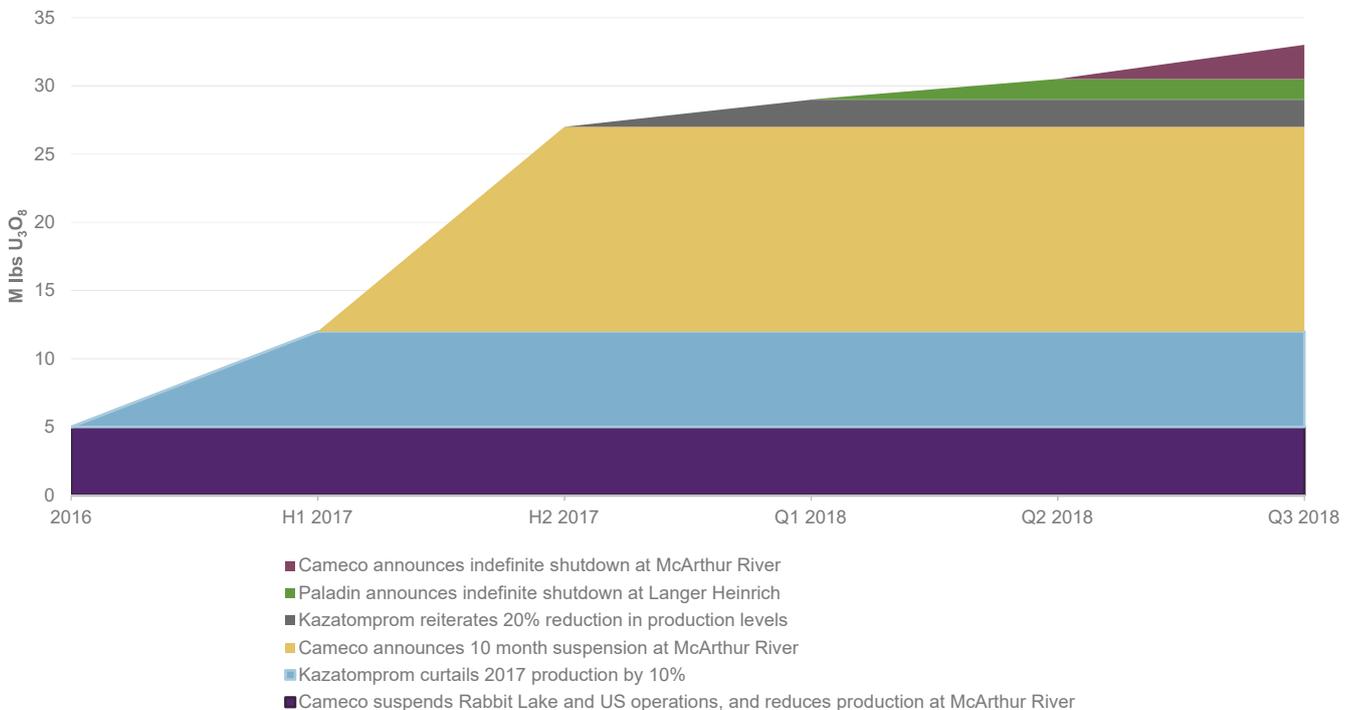
These moves dented demand from the developed world, leading to over-supply and a marked fall in the uranium price. This has had a knock-on effect to uranium equities, but it also seems reasonable that as the price of uranium recovers that this should also be positive for uranium equities' valuations.

Poor pricing environment has curtailed capital investment and led to production cuts

Close to 35 million lbs of annual production has been removed from the uranium market since 2016.

Over time, a lower uranium price has choked off supply as more expensive projects have been taken out of production. Data from Uranium Participation Corporation suggests that supply close to 35 million lbs per annum has been removed from the uranium market since 2016. This progression is illustrated graphically in Figure 4.

Figure 4: Production curtailments since 2016



Source: Uranium Participation Corporation

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

- In Japan, the re-election of Abe's pro-nuclear government has seen it slowly switching its reactors back on.
- 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.
- In recognition of the concentration of uranium supply outside the US, the government has become a section 232 investigation into the security of supply (US section 232 investigation look at the effects of imports on national security). This suggests that, despite cheap shale gas, nuclear continues to be seen as part of the long-term power mix.
- Having 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  $U_3O_8$  purchased in the market, as is the case with Cameco.

The manager's thoughts on some of these issues are explored in more detail below.

## Managers' view

GCL's managers believe 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 the uranium supply-demand fundamentals swinging from a surplus to a deficit. The manager believes the extended bear market period has left the valuations of underlying mining equities at extremely attractive levels. The demand growth outlook is fairly clear in their view, with a build out of new reactors led by emerging regions of China and India, which are focussing on improving air quality. However, in the near-term, the primary driver behind the market's rapid shift to deficit production has been production cuts by major producers such as Kazakhstan and Cameco. Both have stated the need for materially higher pricing before increasing output.

Current uranium prices are up 50% from their recent lows, but are still considerably below the levels required to incentivise new supply. 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.

Nuclear is entering a period of renaissance in the east, where its credentials as a zero-carbon source of base load power are appreciated, primarily for its benefits of displacing polluting coal fired power generation. The managers believe that renewables are unable to displace this portion of the global power supply primarily due to their higher output variability.

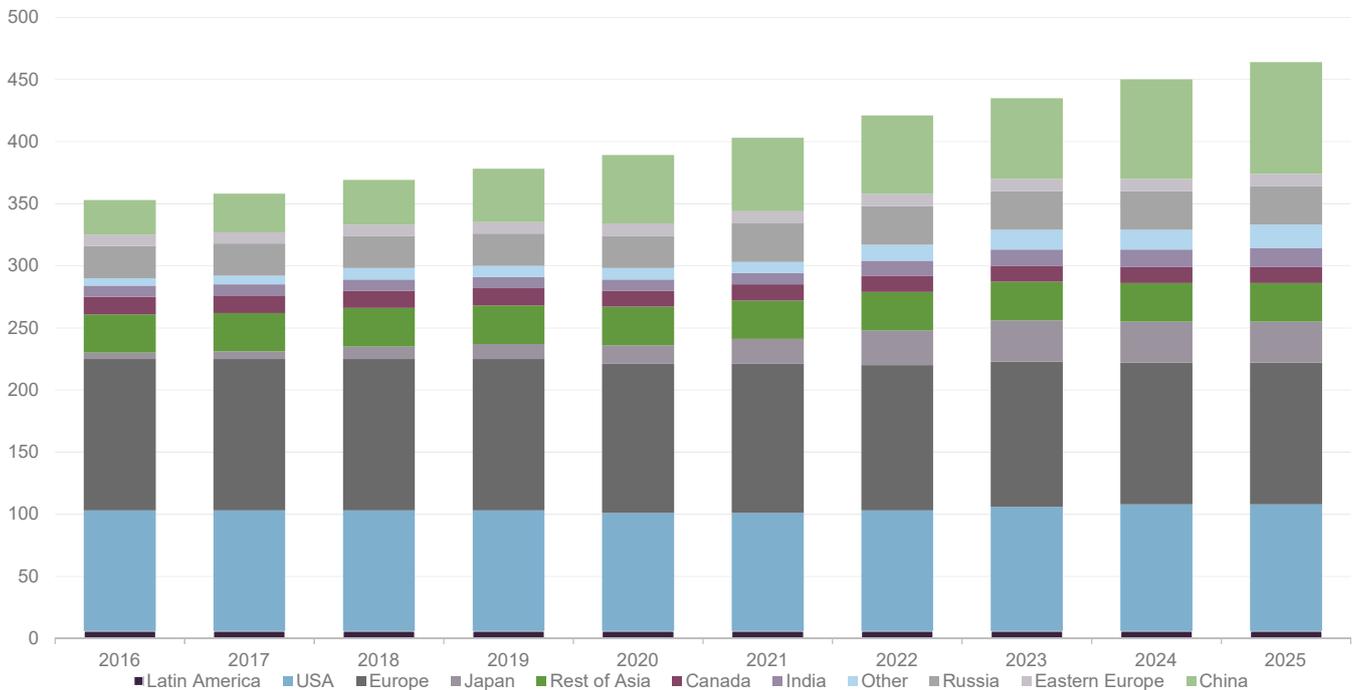
Emerging markets are driving demand growth, particularly in China

Global nuclear operating capacity is expected to expand by 33% between 2016 and 2025.

There is demand growth; as illustrated in Figure 5, global nuclear operating capacity is expected to expand from around 350 gigawatts (GW) in 2016 to around 465GW by 2025 (an increase of 33%). As also illustrated in Figure 5, emerging markets are driving this expansion (developed markets are generally flat or down) with China, India and Russia at the forefront (See Figure 6).

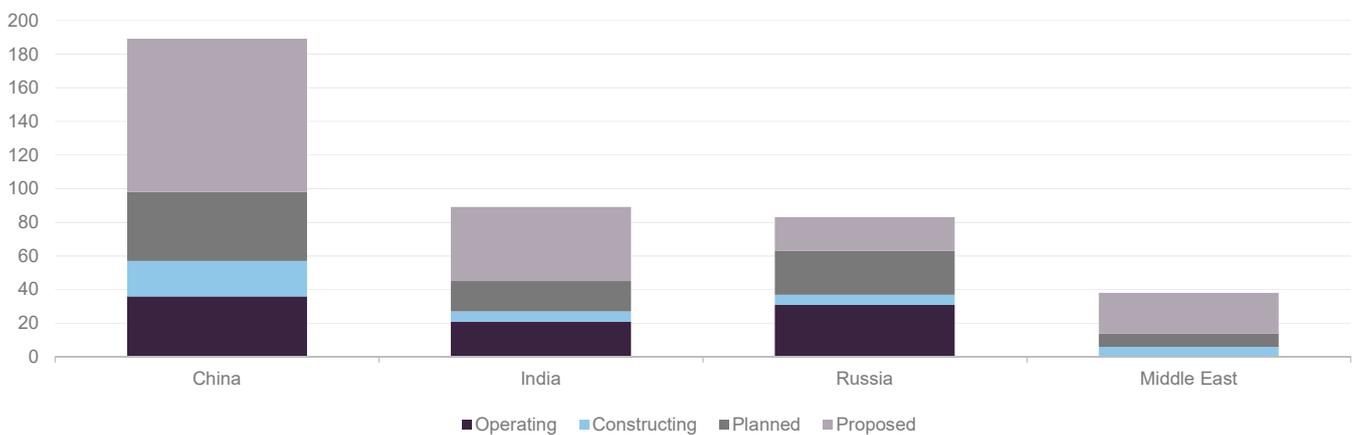
Poor air quality in China (and elsewhere) is driving this increase. According to the manager, China, India and Russia combined represent over 60% of the 566 reactors that are currently under construction globally. In the case of China, the manager says that its new designs are safer, larger and have a longer, 60-year life and are also cost-effective.

Figure 5: Global nuclear operating capacity (GW)



Source: CQS

Figure 6: Nuclear reactor new builds – top four regions



Source: WNA, IAEA, BMO as at January 2018

Declines in North American and Western European nuclear generation capacity are expected to be more than offset by the Asian build-out.

China has developed a 'cookie-cutter' approach that is allowing it to ramp up capacity – the managers say that it is targeting capacity increases from 15GW in 2013 to 200GW by 2030 and 400–500GW by 2050. This aligns with narrative from Uranium Participation. It says that Asia & Oceania remain the key driver of growing demand and are expected to represent over half the global market by 2040. It also says that declines in North America and Western Europe are expected to be more than offset by the Asian build-out.

Another consideration is the programme of nuclear reactor restarts in Japan. This has been slow to get going but now appears to be gathering some pace (five reactors were restarted during 2018, whilst only four had previously restarted since the Fukushima Daiichi disaster). As these reactors restart (Japan has some 54 reactors in total), this will also increase demand for uranium.

### Supply cuts have put the market into deficit

An increasing volume of demand for uranium is not covered by long-term contracts.

The manager says that, with rising demand and curtailed supply, the uranium market has moved into production deficit. Reflecting this, and other market uncertainties, an increasing volume of demand is not covered by long-term contracts. 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, particularly as current market uncertainties are making it difficult for new projects to advance.

### Uranium equities have disconnected from the uranium price

GCL's managers see the potential for a strong recovery in uranium equities as the broader market regains confidence in the sector.

In addition to their positive outlook for the uranium price, the managers highlight that during the last year, there appears to have been a disconnect between the performance of uranium equities and the spot price. With equity performance lagging that of the spot price, the managers see the potential for a strong recovery in equities as the market regains confidence.

## Bottom-up investment process coupled with a top-down macro-overlay

The bulk of the managers' efforts are focused on fundamental analysis.

The team at CQS New City manage their portfolios using a mixture of top-down and bottom-up investment strategies, although, reflecting the concentrated nature of its universe, the bulk of the managers' efforts are focused on fundamental analysis of the risk and return prospects for potential and existing investments. The portfolio is primarily invested in equity securities, but the managers will consider other instruments where they feel these are appropriate.

GCL has a significant exposure to physically backed uranium entities through its holdings in Uranium Participation Corporation and Yellow Cake Plc. However, the fund's primary focus is on companies that the managers believe will offer strong returns at a  $U_3O_8$  price in the range of US\$45/lb to US\$50/lb. The managers believe that prices above this will incentivise some mines to restart leading to a step increase in supply. However, there is also a tail of higher cost projects that will offer operational leverage as the uranium price increases.

The CQS New City team meets an average of 20 resource related companies a week.

## Comprehensive programme of resource company meetings coupled with extensive fundamental analysis

As a recognised investor in the natural resources space, the CQS New City team meets an average of 20 resource related companies a week. The team employs a range of metrics to try and identify undervalued assets, which vary depending on the type of investment (for example, fixed income versus equities) but the team seeks to identify assets that offer superior returns relative to their risk. These will frequently have the potential for capital growth through a rerating of a security. The managers' analysis, which is conducted in-house, includes assessments of:

- the quality of a company's projects. Are the projects in mining friendly jurisdictions? Do the projects have high quality deposits? Are there appropriate transport links as well as access to the necessary processing facilities?
- the quality of a company's management. Does the management team have a good track record in developing or managing similar projects? Do they have experience of operating in the relevant mining jurisdiction? Does management have a good track record in managing its obligations? Does management have a strong corporate governance record as well as a record of treating shareholders fairly?
- the free cashflow available from projects and how this flows to the various security holders within a corporate's capital structure (for example, equity holders, debt holders, preferred stock holders and convertible security holders); and
- the prospect of changes to cashflows (for example, from changes in interest rates or the competitive landscape).

## Macro analysis guides managers research efforts

The macro element of the investment process begins with an assessment of the factors driving global demand and supply for uranium. This considers supply-side factors such as exploration success, capacity developments, potential for supply disruptions and technological developments. It also considers demand-side factors such as new applications, the potential for substitution, and technological developments.

Particular emphasis is placed on developments in the large industrialising emerging markets. These have significant programmes to develop nuclear power stations.

The managers look at demand from developed markets, but particular emphasis is placed on developments in the large industrialising emerging markets, as these (China being an example) have significant programmes to develop nuclear power stations and are expected to be the major source of new demand for uranium in coming years (emerging and frontier markets energy demands tend to increase dramatically as they develop). The analysis also takes into consideration inventory levels and how these might develop. This analysis identifies areas (for example, sub-sectors and geographies) for the managers to focus their attention on when conducting their bottom-up analysis of potential investments.

## Portfolio construction – unconstrained by benchmark

Keith Watson and Robert Crayford can draw on the expertise of the wider CQS New City team.

It should be noted that GCL's portfolio is not managed with reference to any benchmark and, whilst the macro overlay acts as a guide by directing the managers' research efforts, it does not provide specific targets for the geographic and sectoral allocations. Instead, these are a result of the managers' stock selection decisions, which reflect the managers' assessment of the relative strength of individual investment ideas.

The managers, Keith Watson and Robert Crayford, make the final decision on what enters GCL's portfolio, but they are able to draw on the expertise of the wider CQS New City team. Once included in the portfolio, the managers continue to assess stocks to ascertain whether the level remains appropriate.

### Investment restrictions

- GCL’s main focus is on companies involved in the uranium industry, but up to 30% of gross assets may be invested in other resource-related companies.
- GCL’s articles of association do not include a specific gearing limit. Instead, the board sets borrowing limits, which it reviews regularly to ensure that gearing levels are appropriate to market conditions.

## Asset allocation

GCL’s portfolio is highly concentrated.

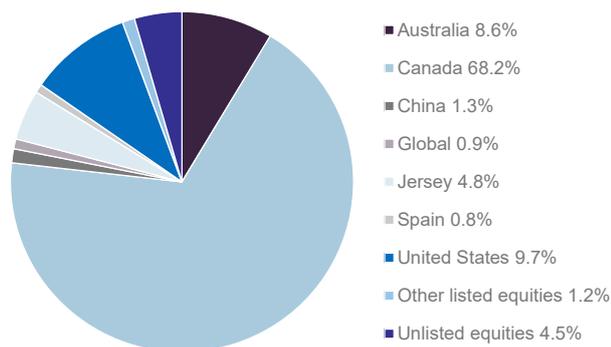
As at 30 November 2018, GCL’s portfolio had exposure to 46 issues, up from 42 issues as at 31 May 2018. GCL’s portfolio is highly concentrated (the top five holdings account for around 55% of the fund – see Figure 8) and to protect the company from being unduly exposed to arbitrageurs, details of its holdings are limited to the top five largest positions in its monthly factsheets. Greater detail is provided in its annual and interim reports, but this data is inevitably more dated by the time these reports are released.

GCL’s portfolio is inherently low turnover.

### Concentrated and low turnover portfolio of uranium stocks

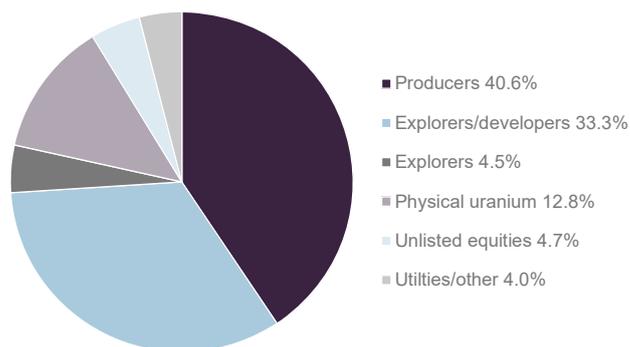
As illustrated in Figure 9, the top five issues accounted for 53.3% of the portfolio as at 31 January 2019, which, perhaps reflecting the increase in the number of issues, has reduced from 56.3% as at the end of July 2018. In part reflecting the managers’ investment style, but also reflecting the concentrated nature of the industry (nine producers control around 90% of supply between them), GCL’s portfolio is inherently low-turnover. The top five holdings at the end of November 2018 comprised the same five stocks that held the top five positions as at the end of May 2018, albeit in a slightly different order.

Figure 7: Portfolio geographic allocation as at 30 September 2018



Source: Geiger Counter, Marten & Co

Figure 8: Portfolio sectoral allocation as at 30 September 2018



Geiger Counter, Marten & Co

Figures 7 and 8 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:

- While 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 is invested in safer assets; that is, 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 7, 8 and 9, GCL’s portfolio has 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 4.7% of net assets 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 manager is more likely to find a mispriced security.

As at 30 September 2018, GCL had four unlisted investments, which accounted for 5.5% of its net assets. It also held three warrants, all of which were held at a 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.

### Top five holdings

Figure 9: Top five holdings as at 31 January 2019

Holding	Sector	Geography	Allocation 31 Jan 19 (%)	Allocation 30 Jul 18 (%)	Change (%)
Nexgen Energy	Exploration and development	Canada	15.3	18.3	(3.0)
UR-Energy	Uranium mining	US	12.1	9.8	2.3
Denison Mines	Exploration and development	Canada	9.8	10.1	(0.3)
Uranium Participation	Holding company	Canada	8.1	8.4	(0.3)
Fission Uranium	Exploration and development	Canada	7.9	9.6	(1.7)
<b>Total of top 5</b>			<b>53.3</b>	<b>56.3</b>	<b>(3.0)</b>

Source: Geiger Counter, Marten & Co

Figure 10: NexGen Energy share price (CAD)



Source: Bloomberg

### NexGen Energy (15.3%)

NexGen Energy ([www.nexgenenergy.ca](http://www.nexgenenergy.ca)) is a uranium exploration and development company with a portfolio of projects that are centred on the Athabasca Basin in Canada, where it holds over 259k hectares of land. NexGen’s southwestern Athabasca Rook 1 property hosts the Arrow Deposit, the South Arrow discovery, the Harpoon discovery, the Bow discovery and the Cannon area. All of these are 100% owned by NexGen.

NexGen says that, at a price of US\$50/lb for U<sub>3</sub>O<sub>8</sub>, it estimates that Arrow’s first life of mine production will generate CAD909m per annum of after-tax net cashflow. This equates to 25.4m pounds of uranium production at an operating cost of US\$4.36 per pound. NexGen says that, on this basis, the project has an operating margin in excess of 90% making it potentially the largest and lowest cost uranium mine globally.

NexGen also holds a 64% interest in IsoEnergy Ltd. ([www.isoenergy.ca](http://www.isoenergy.ca)). This holds what NexGen describes as “a highly prospective portfolio of Eastern Athabasca Basin properties that include Thorburn Lake (7km from Cigar Lake) and the Radio Project (adjacent to the Roughrider deposit)”.

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.

**Figure 11: UR-Energy share price (US\$)**



Source: Bloomberg

## UR-Energy (12.1%)

UR-Energy ([www.ur-energy.com](http://www.ur-energy.com)) is a junior uranium mining company that operates an in-situ uranium recovery facility at its Lost Creek property in south-central Wyoming. It also owns the Shirley Basin and Lucky Mc mine sites in the Shirley Basin and Gas Hills mining districts of Wyoming. These were acquired in 2013 along with all of the historic geological and engineering data for the project (it has nearly 3,200 historic drill holes). The tailings facility at the Shirley Basin site is also one of the few remaining facilities in the United States that is licensed by the US Nuclear Regulatory Commission (NRC) to receive and dispose of by-product waste material from other in-situ uranium mines.

GCL's manager says that UR-Energy has decent quality assets and a proven operational record. It is also one of two companies (the other is Energy Fuels) that petitioned the US Department of Commerce (DOC) for a 25% domestic purchase quota for uranium that would limit imports. If successful, the implementation of the quota would almost certainly benefit UR-Energy as one of a limited number of domestic US producers, most likely at the expense of Canadian producer Cameco, which makes significant imports into the US. The petition is not without its critics; US nuclear power generators were already complaining that they were struggling with reduced competitiveness (against emerging technologies in particular), and have argued strongly that tariffs or quotas would lead to an increase in their fuel costs.

## Denison Mines (9.8%)

**Figure 12: Denison Mines share price (CAD)**



Source: Bloomberg

Like NexGen Energy, Denison Mines ([www.denisonmines.com](http://www.denisonmines.com)) is a uranium exploration and development company that has a portfolio of projects that are centred on the Athabasca Basin in Canada. Its projects cover some 320k hectares and include its 90% owned Wheeler River project, which the company says is "the largest undeveloped high-grade uranium project in the infrastructure rich eastern portion of the Athabasca Basin region".

Denison's also has a 22.5% interest in the McClean Lake joint venture. This includes several uranium deposits and the McClean Lake uranium mill, which is currently processing ore from the Cigar Lake mine under a toll milling agreement. Denison also has a 25.17% interest in the Midwest and Midwest A deposits, and a 65.45% interest in the J Zone deposit and Huskie discovery on the Waterbury Lake property. Midwest, Midwest A, J Zone and Huskie are all conveniently located within 20 kilometres of the McClean Lake mill.

In addition to these interests, Denison also engages in mine decommissioning and environmental services through its Denison Environmental Services division, and it is also the manager of Uranium Participation Corporation (see below).

## Uranium Participation (8.1%)

**Figure 13: Uranium Participation share price (CAD)**



Source: Bloomberg

Uranium Participation ([www.uraniumparticipation.com](http://www.uraniumparticipation.com)) is a fund that invests in uranium oxide and uranium hexafluoride. It aims to achieve appreciation in the value of its uranium holdings through increases in the uranium price. The fund, which is managed by Denison Mines Inc, a wholly owned subsidiary of Denison Mines (see above), also lends its uranium to third parties from time to time.

All uranium owned by Uranium Participation is stored at licensed uranium conversion, enrichment, or fuel fabrication facilities that are owned by different organisations in Canada, France, England, Germany, the Netherlands and the United States. The terms of storage are negotiated by the fund's manager. Uranium Participation's manager says

that these Facilities represent the only viable source of storage, at present, and are also used by global nuclear energy utilities, and commodity traders for their storage needs. Accordingly, it says that its risks, in respect of ownership and storage, are similar to those of any participant in the nuclear energy industry.

**Fission Uranium (7.9%)**

**Figure 14: Fission Uranium share price (CAD)**



Source: Bloomberg

Fission Uranium ([www.fissionuranium.com](http://www.fissionuranium.com)) describes itself as “one of the most successful exploration companies in the uranium sector”. Like NexGen Energy and Denison Mines (see page 14), Fission Uranium is a uranium exploration and development company that is focused on the Athabasca Basin in Canada. Its primary asset is its wholly owned Patterson Lake South project, which is home to the Triple R deposit. Fission Uranium have described the Triple R deposit as the most significant high-grade, near-surface project in the region. The Patterson Lake South Project comprises 17 mineral claims totalling 31,039 hectares that are located on the southwest margin of the Athabasca Basin. The property is accessible by all-weather Highway 955.

**Performance**

**Figure 15: GCL NAV performance relative to the URAX Index – rebased to 100 over five years to 28 February 2019**



Source: Morningstar, Marten & Co.

As partly illustrated in the performance chart on the front page of this 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 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.

GCL’s NAV broadly outperformed the URAX Index and the Global X Uranium ETF up until mid-2015 but has failed to keep pace since.

As illustrated in Figure 15 and 16, GCL’s NAV broadly outperformed the URAX Index and the Global X Uranium ETF up until mid-2015, when the Uranium market started to turn, but has failed to keep pace since. This may be due to its bias away from the majors, which would appear to respond more quickly in a recovery.

Looking at the cumulative performance table in Figure 16, it is clear that near-term performance has impacted GCL’s longer term numbers. Given the volatile nature of the

sector, we consider that longer term numbers are better used to assess performance. It is therefore noteworthy that GCL outperforms the Global X Uranium ETF over the three and five-year periods (10-year data for the ETF is not yet available). It does underperform the URAX Index by some margin over three years and to a lesser extent five-years. However, while GCL's performance has lagged recently, its managers argue that, over the medium to long term, its holdings have superior growth potential and should be more leveraged to the upside. This suggests the possibility of strong performance if the uranium market continues to make positive progress and the junior players are able to catch up.

Figure 16: Cumulative total return performance to 28 February 2019 (all in sterling terms)

	1 month (%)	3 months (%)	6 months (%)	1 year (%)	3 years (%)	5 years (%)	10 years (%)
GCL NAV	(0.9)	(12.8)	(12.3)	0.4	7.1	(45.7)	(44.2)
GCL share price	3.8	(12.0)	(6.7)	0.0	47.3	(35.7)	(16.5)
URAX	0.9	5.9	5.1	11.2	74.4	(18.9)	(15.2)
Cameco	(5.2)	(5.9)	9.7	37.2	7.3	(32.8)	2.1
Global X Uranium ETF	(3.7)	(5.2)	(5.0)	1.0	3.0	(56.7)	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.

## Peer group

GCL is a member of the Association of Investment Companies (AIC)'s specialist commodities and natural resources sector, which comprises 10 members. Eight of these are illustrated in Figures 17 through 19. For the purposes of this peer group analysis, we have excluded Global Resources Investment Trust (GRIT) and Tiger Resource Finance (TIR) as we do not believe that they have the necessary scale or liquidity to make them valid comparators for GCL.

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

Whilst they are all members of the commodities and natural resources sector, the funds used in this peer group comparison are quite diverse, and GCL is somewhat unique as it is the only fund that is uranium-focused. GCL is not the only fund with a narrow focus, however. For example, Golden Prospect Precious Metals is focused on gold; Riverstone Energy has a concentrated portfolio of energy companies that are primarily engaged in oil exploration and production; El Oro has an eclectic mix of holdings some of which are not at all resource focused; and the BlackRock funds are both primarily invested in larger cap stocks. However, none of the funds used are perfect comparators for GCL.

Figure 17: Peer group cumulative NAV total return performance to 28 February 2019

	1 month (%)	3 months (%)	6 months (%)	1 year (%)	3 years (%)	5 years (%)
<b>GCL</b>	<b>(0.9)</b>	<b>(12.8)</b>	<b>(12.3)</b>	<b>0.4</b>	<b>7.1</b>	<b>(45.7)</b>
Baker Steel Resources	(3.9)	(3.4)	4.6	2.0	65.9	(3.7)
BlackRock Com. Income	0.8	4.5	(3.7)	6.0	65.5	0.2
BlackRock World Mining	0.2	8.7	4.1	(2.1)	97.8	6.2
CQS Natural Res G&I	2.2	1.1	(12.2)	(22.8)	24.7	(10.2)
El Oro	0.0	(4.3)	(2.8)	(10.5)	14.9	(9.4)
Golden Prospect	1.2	9.2	(15.8)	(28.2)	(8.5)	(43.6)
Riverstone Energy	(1.3)	(15.1)	(12.9)	(10.3)	26.5	42.6
<b>GCL rank</b>	<b>6</b>	<b>7</b>	<b>6</b>	<b>3</b>	<b>7</b>	<b>8</b>
<b>Sector arithmetic avg.</b>	<b>(0.2)</b>	<b>(1.5)</b>	<b>(6.4)</b>	<b>(8.2)</b>	<b>36.7</b>	<b>(8.0)</b>

Source: Morningstar, Marten & Co.

The closest peer to GCL is Yellow Cake Plc (YCA). This company is less than a year old (it listed on the AIM segment of the LSE in July 2018) and was established to purchase and hold triuranium octoxide (this is held in a storage account at Cameco's Port Hope/Blind River facility in Ontario, Canada). It aims to provide investors with exposure to the uranium price and to exploit a range of opportunities offered by holding physical uranium. YCA has been excluded from the comparison, in Figures 17 to 19, due to its very short track record and the limited data currently available (YCA publishes quarterly rather than daily Net Asset Values (NAVs), for example).

As illustrated in Figure 17, GCL's recent NAV total return performance has eaten into its longer-term performance record. Whilst this is also true of its share price total return, this is not as apparent, as a renewed interest in uranium has seen GCL move from trading at a market discount to trading at a significant premium (GCL was the only fund trading at a premium as at 18 February 2019 – See Figure 18).

Figure 18: Peer group cumulative share price total return performance to 28 February 2019

	1 month (%)	3 months (%)	6 months (%)	1 year (%)	3 years (%)	5 years (%)
<b>GCL</b>	3.8	(12.0)	(6.7)	0.0	47.3	(35.7)
<b>Baker Steel Resources</b>	5.6	6.7	4.4	(5.9)	233.3	6.7
<b>BlackRock Com. Income</b>	4.4	8.0	(1.2)	2.1	55.3	(6.1)
<b>BlackRock World Mining</b>	0.8	8.8	1.6	(4.8)	111.9	(4.5)
<b>CQS Natural Res G&amp;I</b>	3.5	(0.7)	(10.8)	(18.6)	29.8	(10.5)
<b>EI Oro</b>	0.0	(8.8)	(11.8)	(4.0)	53.6	(4.6)
<b>Golden Prospect</b>	6.3	14.9	(7.0)	(36.8)	(14.1)	(54.3)
<b>Riverstone Energy</b>	(3.8)	(14.1)	(20.3)	(14.1)	23.0	9.8
<b>GCL rank</b>	4	7	4	2	5	7
<b>Sector arithmetic avg.</b>	2.6	0.3	(6.5)	(10.3)	67.5	(12.4)

Source: Morningstar, Marten & Co.

The volatility of GCL's NAV returns is the highest of the peer group, perhaps reflecting the fact that it has a more concentrated portfolio than a number of the funds in the peer group, as well as having have a narrow focus.

Figure 19: Peer group comparison – size, fees, discount, yield and gearing as at 15 March 2019

	Market cap (£m)	St. dev. of NAV returns over 5 years	Ongoing charges (%)	Perf. fee	Discount (%)	Dividend yield (%)	Gross gearing	Net gearing
<b>GCL</b>	18.0	43.0	2.48*	Yes	4.9	-	22.2	22.2
<b>Baker Steel Resources</b>	55.2	18.2	2.17	Yes	(16.8)	-	N/A**	N/A**
<b>BlackRock Com. Income</b>	87.3	25.4	1.36	No	(4.8)	5.3	9.4	10.2
<b>BlackRock World Mining</b>	634.8	28.7	0.98	No	(14.0)	5.0	15.0	14.0
<b>CQS Natural Res G&amp;I</b>	61.6	23.6	1.74	No	(17.2)	6.2	19.0	12.9
<b>EI Oro</b>	39.2	29.0	1.42	Yes	(18.8)	4.1	N/A**	N/A**
<b>Golden Prospect</b>	12.1	34.3	2.31	Yes	(25.6)	-	9.2	9.2
<b>Riverstone Energy</b>	807.0	16.1	2.25	No	(27.7)	-	N/A**	N/A**
<b>GCL rank</b>	7	8	8		1	5	5	5
<b>Sector arithmetic avg.</b>	214.4	27.3	1.84		(15.0)	2.6	15.0	13.7

Source: Morningstar, AIC MIR, Marten & Co. \*Note: Marten & Co ongoing charges estimate for the year ended 30 September 2018. Excludes performance fee although GCL has not paid a performance fee since the year ended 30 September 2008 – see page 19. \*\*Note: recent data not available.

GCL's has the highest ongoing charges ratio in its peer group. This does in part reflect its relatively small size. The management contract does allow GCL's manager to potentially earn a performance fee, but it has not paid one since 2008. GCL does not pay a yield (see above and overleaf) and, whilst we have incomplete information in

terms of gearing levels across the peers, GCL's is the highest among those for which recent data is available. This means it will benefit if uranium continues to perform well, but will suffer disproportionately if not.

## No dividend – capital growth focused

Traditionally, commodities and natural resources have been among the lower-yielding sectors, while holdings in physical commodities do not pay dividends.

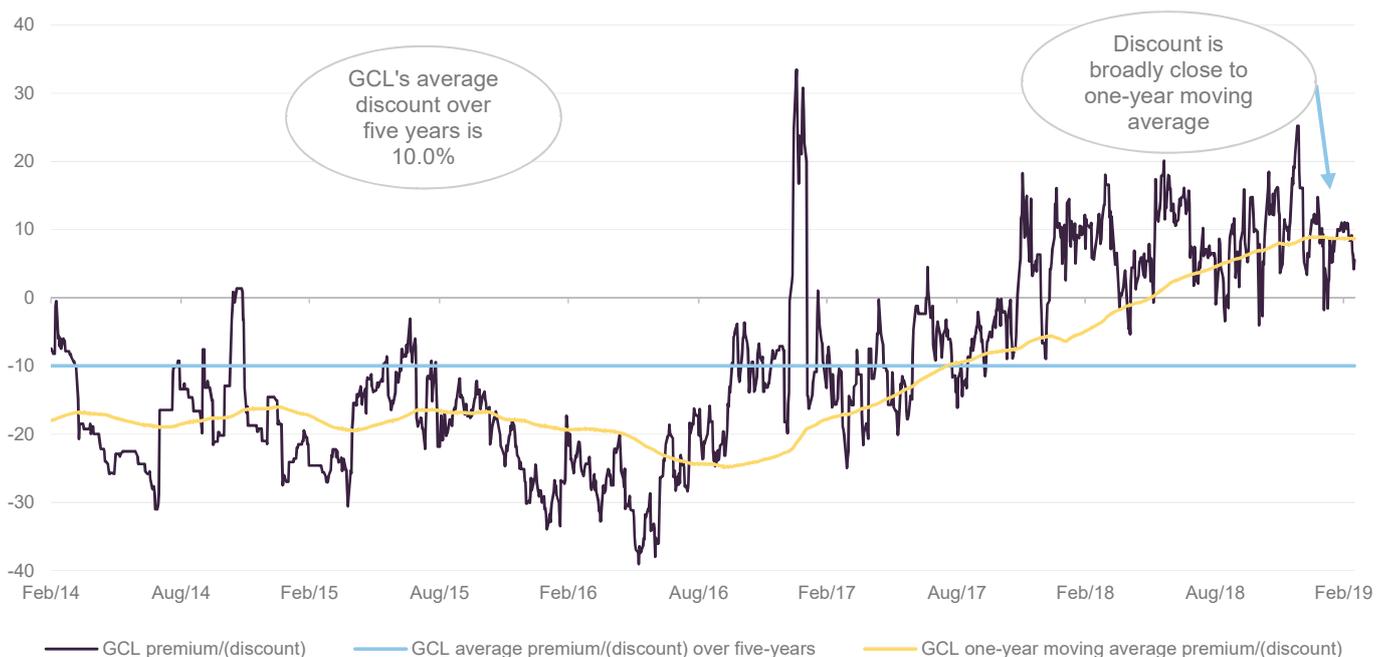
GCL's investment objective is to achieve returns primarily through capital growth. GCL does not have a formal dividend policy and has not paid a dividend since its launch. The investment objective and dividend policy are both a reflection of GCL's underlying investments. Traditionally, commodities and natural resources have been among the lower-yielding sectors. These industries are capital-intensive, and companies have frequently retained a high proportion of earnings for reinvestment in the business, rather than returning cash to shareholders. In addition, where GCL holds physical commodities, these do not pay dividends. The combined effect is that GCL's dividend income tends to be a relatively small component of its total return. As at 30 September 2018, GCL had accumulated revenue reserves equal of £423k, equivalent to 0.51p per share (2017: £789k or 1.04p per share).

## Premium/(discount)

GCL has moved from trading at a marked discount to a significant premium during the last two and a half years.

As illustrated in Figure 20, GCL has during the last two and a half years moved from trading at a marked discount to a significant premium, albeit with marked volatility in the premium/discount. This tightening coincides with a recovery in the broader uranium market as supply conditions have tightened, the uranium price has recovered, and sentiment has improved.

Figure 20: Premium/(discount) over GCL five years



Source: Morningstar, Marten & Co.

GCL has recently 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.

Base management fee of 1.375% of net assets plus bank borrowings and accrued performance fees.

Performance fee: 20% of outperformance subject to an 8% hurdle.

GCL has recently issued stock while it has been trading at a premium (stock was most recently issued in December 2018 at a premium of around 11%). 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 15.0% as at 15 March 2019 (see Figure 18), 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 5.3% and a premium of 25.2%, with an average premium of 10.0%.

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 would likely 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's size, as discussed above). Instead, we believe that GCL would be better served by increasing its size, with its efforts on increasing awareness of GCL among investors.

## Fees and costs

Under the terms of the investment management agreement, CQS is entitled to receive a basic management fee of 1.375% per annum of net assets (after adding back any accrued performance fees and bank borrowings). The management fee is calculated and paid monthly in arrears and the company valued monthly, with assets valued using mid-market prices.

CQS is also entitled to a performance fee of 20% of any of the outperformance of GCL's net assets, in total return terms, above an 8% per year hurdle rate. The performance fee is calculated and, where due, is paid annually based on the value of GCL's net assets as at 30 September each year. GCL has not paid a performance fee since the year ended 30 September 2008.

GCL's management agreement can be terminated on 12 months' notice by either side.

## Fund administration services

GCL has an agreement with R&H Fund Services (Jersey) Limited for R&H to provide administrative, compliance oversight and company secretarial services to GCL.

Under the administration agreement, R&H is entitled to an administration fee calculated as 0.1% of GCL's gross assets up to £50m and 0.075% of gross assets in excess of £50m. The administration fee is subject to an overall minimum fee of £75,000 per annum and an overall maximum fee of £115,000 per annum. R&H's total fees for the year ended 30 September 2017 were £74,794 (2016: £75,205).

## Allocation of fees and costs

The investment management fee, finance costs and costs incurred in relation to the disposal of investments are charged wholly to capital. All other expenses are charged

wholly to revenue. We estimate the ongoing charges ratio for the year ended 30 September 2018 at 2.48% (2017: 2.29%).

## Capital structure and life

GCL has both ordinary and subscription shares in issue.

GCL has a relatively simple capital structure with two classes of share in issue: ordinary and subscription shares (both of nil par value). Both share classes are traded on the London Stock Exchange and, as at 15 March 2019, there were 82,977,880 ordinary shares in issue and 37,483,835 subscription shares in issue. As at the same date, there were no ordinary shares or subscription shares held in treasury.

### Subscription shares

On 13 December 2017, GCL made a bonus issue of subscription shares, to existing ordinary shareholders, on the basis of one subscription share for every two ordinary shares held.

GCL's subscription shares can be exercised on the last business day of November 2019 and 2020 at 26.17p and 28.55p per share respectively.

Each subscription share confers the right, but not the obligation, to subscribe for one ordinary share on the last business day of November 2019 and 2020 (the first subscription date was the last business day of November 2018, which saw 308,388 subscription shares exercised at a price of 24.98p per share). The subscription price was set as the unaudited NAV as at 13 December 2017 plus a premium of 5%, 10% and 20% respectively if exercised in November 2018, 2019 or 2020. The November 2019 and 2020 subscription prices are set at 26.17p and 28.55p per share respectively.

### Borrowing facility

GCL's borrowings are not expected to exceed 35% of its net assets.

GCL is permitted to borrow and has a credit facility with Credit Suisse Dublin AG that can be used for this purpose. The credit facility incurs interest at a rate of Libor + 1.75%. GCL's articles of association do not have any specific borrowing limits, although the board has previously said that GCL's borrowings are not expected to exceed 35% of its net assets. Borrowings under the credit facility are limited to the collateral held by Credit Suisse, which is effectively GCL's investment portfolio. GCL does not have any other borrowing facilities in place and, as at 28 February 2019, GCL had gross and net gearing of 22.2%.

### Unlimited life with an annual continuation vote

GCL does not have a fixed winding-up date but at each annual general meeting (AGM), shareholders are given the opportunity to vote on the continuation of the company. This is an ordinary resolution. If this resolution is not passed, the board is required to put forward proposals to shareholders, within four months, to liquidate or otherwise reconstruct or reorganise the company.

Miton Group Plc had a combined holding of 10.04% of GCL's ordinary shares as at 30 September 2018.

### Major shareholders

As at 30 September 2018, no individual shareholder held more than 10% of GCL's ordinary shares. Richard Lockwood, a director of GCL, held 4.3% of GCL's issued share capital as at 15 March 2019 (see page 23). The company has also said that it was aware that Miton Group Plc had a combined holding of 10.04% as at 30 September 2018.

The next AGM is scheduled for 8 March 2019.

GCL is listed on the International Stock Exchange and is traded on the London Stock Exchange.

GCL is co-managed by Keith Watson and Rob Crayfourd, with support from the wider team at CQS.

## Financial calendar

The trust's year-end is 30 September. The annual results are usually released in December (interims in June) and its AGMs are usually held in March of each year. The next AGM is scheduled for 8 March 2019.

## Corporate history

GCL is a Jersey-domiciled closed-ended investment company incorporated on 6 June 2006. It listed on the International Stock Exchange (formerly the Channel Islands Stock Exchange) on 7 July 2006 and trades on the London Stock Exchange SETS QX Electronic Trading Service (GCL was admitted to trading on the LSE on 10 July 2006).

## Management team

GCL is co-managed by Keith Watson and Rob Crayfourd. Keith and Rob are able to draw on the expertise of the wider team at CQS. This includes Ian "Franco" Francis who, with over 35 years' investment experience, primarily in the fixed interest and convertible spheres, can assist with the small number of fixed income investments that GCL may hold from time to time. (Ian manages the CQS New City High Yield Fund – [click here to read our most recent note on this fund](#)).

### Keith Watson

Keith Watson joined the NCIM team in 2013, initially as a dedicated natural resources analyst. Prior to NCIM, Keith worked for Mirabaud Securities, where he was a senior natural resource analyst; Evolution Securities, where he was director of mining research; Dresdner Kleinwort Wasserstein, where he was a top-ranked business services analyst; Commerzbank; and Credit Suisse/BZW. Keith began his career in 1992 as a portfolio manager and research analyst at Scottish Amicable Investment Managers. He has a BSc (Hons) in Applied Physics from Durham University.

### Robert (Rob) Crayfourd

Rob Crayfourd joined the NCIM team in 2011. He has over 13 years' financial experience, having previously worked for the Universities Superannuation Scheme and HSBC Global Asset Management where he focused on the resources sector. Rob holds a BSc in Geological Sciences from the University of Leeds and is a CFA charterholder.

## Board

GCL's board is comprised of four directors, all of whom are non-executive and considered to be independent of the investment manager. Other than GCL's board, its directors do not have any other shared directorships. As noted on page 23, Richard Lockwood founded GCL's investment manager, NCIM, in December 2003. NCIM was sold to CQS in 2007, and Richard retired in 2012. Richard has been a strategic consultant to all of the NCIM funds, but is no longer involved with NCIM. It is also noteworthy that Richard has a substantial personal investment in GCL (equivalent to

4.3% of its issued share capital as at 15 March 2019). This should help to align interests with those of shareholders and assist in bolstering his independence.

Board members offer themselves for re-election annually.

Board policy is that all of GCL's board members retire and offer themselves for re-election annually. GCL's articles of association limit the maximum remuneration for directors to £30,000 per director per annum.

Figure 21: Board member – length of service and shareholdings

Director	Position	Date of appointment	Length of service (years)	Annual director's fee (GBP)	Share-holding*	Years of fee invested*
George Baird	Chairman	14 October 2015	3.4	21,600	-	-
Gary Clark	Chairman of the audit and risk committee	14 October 2015	3.4	17,700	189,000	2.1
James Leahy	Director	1 October 2014	4.5	16,200	-	-
Richard Lockwood	Director	1 May 2011	7.9	16,200	3,584,000	43.4
<b>Average (service length, fee, shareholding, fees invested)</b>			<b>4.8</b>	<b>17,925</b>	<b>943,475</b>	<b>11.4</b>

Source: Geiger Counter, Marten & Co. \*Note: shareholdings as per most recent company announcements as at 15 February 2019. Years of fee invested based on GCL's ordinary share price of 19.60p as at 15 March 2019.

### George Baird (chairman)

George Baird, a Jersey resident since 1980, is a chartered accountant with a variety of experience in Finance, particularly in local government. He is now a non-executive director of several Channel Islands-based companies including Aberdeen Latin American Income Fund limited, LXB Retail Properties Plc and Yatra Capital Limited.

Prior to his retirement in 2002, George was finance director with the Mourant Group and was Treasurer of the States of Jersey (from 1991). In this role, George was one of the most senior civil servants reporting to the Finance and Economics Committee, whose main responsibility was defining and implementing government financial and budget strategy. Prior to this, George worked in local government in Scotland, and for Arthur Young McClelland Moores & Co, where he became a member of the Institute of Chartered Accountants of Scotland in 1975.

George is also a non-executive director and chairman of the audit committee for Thread Green Industrial Limited and until recently held the same roles at Economic Lifestyle Property Investment Co Limited. George graduated from Dundee University, with a degree in Law, in 1971.

### Gary Clark (chairman of the audit and risk committee)

Gary Clark is a chartered accountant with considerable experience in the investment fund industry. He is a non-executive director on a number of boards that cover investment funds, fund managers and investment management for a variety of financial services businesses. These include Emirates, Standard Life Aberdeen, Blackstone and ICG.

Gary served as chairman of the Jersey Fund Association from 2004 to 2007 and was managing director at AIB Fund Administrators Limited when it was acquired by Mourant in 2006. This business was sold to State Street in 2010, and until 1 March 2011, Gary was a managing director at State Street and their head of hedge fund services in the Channel Islands. Prior to his time at State Street, Mr Clark was managing director of the futures broker, GNI (Channel Islands) Limited in Jersey.

Gary was one of a number of practitioners involved in a number of significant changes to the regulatory regime for funds in Jersey. This included the move to function-based regulation and introduction of both Jersey's expert funds and unregulated funds regimes. Gary is resident in Jersey. He graduated with a degree in mining engineering from Nottingham University in 1986.

### James Leahy (director)

James Leahy has over 30 years' experience in the mining sector as a senior mining analyst and as a specialist corporate broker with expertise in international institutional and hedge funds, foreign capital and private equity markets. He has previously worked at James Capel, Credit Lyonnais, Nedbank and Canaccord, and he was the founding partner of Mirabaud Securities. During his career, James has raised funds for a wide range of projects worldwide that include industrial minerals, precious metals, copper, diamonds, coal, iron ore, uranium and lithium (he was involved in more than 30 IPOs and a large number of primary and secondary placings).

Since 2010, James has been a director of a number of mining and exploration companies. His former roles include: non-executive director of Continental Coal Limited (between May 2011 and July 2013); a director of African Power Corporation (between May 2011 and May 2014); non-executive director of Bacanora Lithium Plc (between July 2011 and May 2017 – this also included a stint as interim chairman between July and November 2016); non-executive director of Forte Energy NL (between April 2012 and August 2015); non-executive director of BOS GLOBAL Holdings Limited (between April 2012 and August 2015); independent non-executive director of Mineral Commodities Limited (between December 2012 and May 2015); and independent non-executive director of Bellzone Mining Plc (Between November 2014 and May 2015).

James, a UK resident, has been a member of the advisory board at Aton Resources Inc since October 2015 and is a director of a private start-up, Energy Minerals Investments Ltd.

### Richard Lockwood (director)

Richard Lockwood has over 50 years' experience in the mining and natural resources space, primarily with Hoare Govett, where he was a partner. He was a founding director of City Merchants High Yield Trust Plc, which he managed from May 1991 to April 2003. He then joined Midas Capital Partners Limited in June 2003 before founding New City Investment Managers Limited (NCIM) in December 2003. NCIM was sold to CQS in October 2007 and Richard continued to be involved in the management of NCIM funds until his retirement in January 2012 (this included the management of City Natural Resources High Yield Trust). Richard is no longer involved in NCIM or CQS but has previously acted as a strategic consultant to all NCIM funds, including Geiger Counter.

Richard has held a number of resource and investment management related directorships. These former directorships include: Kalahari Minerals (between March 2010 and February 2012); Ambrian Plc (between July 2001 and May 2007); Marechale Capital (between July 2001 and December 2001); VSA Capital (between April 1997 and December 2001); and Citadel Holdings (June 1997 and November 2000).

Richard, a UK resident, founded Praetorian Resources in July 2012 (now Duke Royalty). He is non-executive chairman of ASX-listed Ausgold Limited, has been a director of Arlington Group Asset Management since December 2012, and founded Auctus Growth Plc in 2014.

Authorised and regulated by the Financial Conduct Authority  
123a Kings Road, London SW3 4PL  
0203 691 9430

[www.martenandco.com](http://www.martenandco.com)

Registered in England & Wales number 07981621,  
2nd Floor Heathmans House  
19 Heathmans Road, London SW6 4TJ

#### Investment company sales:

Edward Marten  
([em@martenandco.com](mailto:em@martenandco.com))

Alistair Harkness  
([ah@martenandco.com](mailto:ah@martenandco.com))

David McFadyen  
([dm@martenandco.com](mailto:dm@martenandco.com))

#### Investment company research:

Matthew Read  
([mr@martenandco.com](mailto:mr@martenandco.com))

James Carthew  
([jc@martenandco.com](mailto:jc@martenandco.com))

Shonil Chande  
([sc@martenandco.com](mailto:sc@martenandco.com))

## IMPORTANT INFORMATION

This marketing communication has been prepared for Geiger Counter Limited by Marten & Co (which is authorised and regulated by the Financial Conduct Authority) and is non-independent research as defined under Article 36 of the Commission Delegated Regulation (EU) 2017/565 of 25 April 2016 supplementing the Markets in Financial Instruments Directive (MIFID). It is intended for use by investment professionals as defined in article 19 (5) of the Financial Services Act 2000 (Financial Promotion) Order 2005. Marten & Co is not authorised to give advice to retail clients and, if you are not a professional investor, or in any

other way are prohibited or restricted from receiving this information, you should disregard it. The note does not have regard to the specific investment objectives, financial situation and needs of any specific person who may receive it.

The note has not been prepared in accordance with legal requirements designed to promote the independence of investment research and as such is considered to be a marketing communication. The analysts who prepared this note are not constrained from dealing ahead of it but, in practice, and in accordance

with our internal code of good conduct, will refrain from doing so for the period from which they first obtained the information necessary to prepare the note until one month after the note's publication. Nevertheless, they may have an interest in any of the securities mentioned within this note.

This note has been compiled from publicly available information. This note is not directed at any person in any jurisdiction where (by reason of that person's nationality, residence or otherwise) the publication or availability of this note is prohibited.

---

**Accuracy of Content:** Whilst Marten & Co uses reasonable efforts to obtain information from sources which we believe to be reliable and to ensure that the information in this note is up-to-date and accurate, we make no representation or warranty that the information contained in this note is accurate, reliable or complete. The information contained in this note is provided by Marten & Co for personal use and information purposes generally. You are solely liable for any use you may make of this information. The information is inherently subject to change without notice and may become outdated. You, therefore, should verify any information obtained from this note before you use it.

**No Advice:** Nothing contained in this note constitutes or should be construed to constitute investment, legal, tax or other advice.

**No Representation or Warranty:** No representation, warranty or guarantee of any kind, express or implied is given by Marten & Co in respect of any information contained on this note.

**Exclusion of Liability:** To the fullest extent allowed by law, Marten & Co shall not be liable for any direct or indirect losses, damages, costs or expenses incurred or suffered by you arising out of or in connection with the access to, use of or reliance on any information contained on this note. In no circumstance shall Marten & Co and its employees have any liability for consequential or special damages.

**Governing Law and Jurisdiction:** These terms and conditions and all matters connected with them, are governed by the laws of England and Wales and shall be subject to the exclusive jurisdiction of the English courts. If you access this note from outside the UK, you are responsible for ensuring compliance with any local laws relating to access.

No information contained in this note shall form the basis of, or be relied upon in connection with, any offer or commitment whatsoever in any jurisdiction.

---

**Investment Performance Information:** Please remember that past performance is not necessarily a guide to the future and that the value of shares and the income from them can go down as well as up. Exchange rates may also cause the value of underlying overseas investments to go down as well as up. Marten & Co may write on companies that use gearing in a number of forms that can increase volatility and, in some cases, to a complete loss of an investment.