

# CORCEL

## MINING AND ENERGY GRID SOLUTIONS

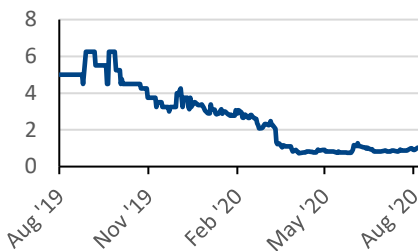
11 August 2020

CRCL.L

1.03p

Market Cap: £1.9m

### SHARE PRICE (p)



12m high/low

6.3p/0.7p

Source: LSE Data

### KEY DATA

Net (Debt)/Cash	£(0.7)m (at 31/12/19)
Enterprise value	£2.6m
Index/market	AIM
Next news	FY20 results Dec 20
Shares in Issue (m)	189.9
Chairman	James Parsons
Chief Executive	Scott Kaintz

### COMPANY DESCRIPTION

Battery metals, mining and flexible energy storage and generation solutions

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

CORCEL IS A RESEARCH CLIENT OF PROGRESSIVE

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## Rebranding Completes Strategic Restructuring

The rebranding of Regency Mines as Corcel Plc completes more than a year of strategic development and a major restructuring of the balance sheet and the management of the company. Corcel offers investors direct access to leading global battery metals mining assets and to a developing energy generation and storage business. Corcel therefore offers investors exposure to both the growing demand for battery metals and to the type of flexible grid solutions in which batteries will increasingly play a major part.

- Strategic refocus.** Corcel has operated as a quoted diverse mining company for over 15 years in its previous incarnation. Like many peers, it has been adversely affected by the volatility of prices and demand for metals following the banking crisis, which in many cases made it difficult to advance exploration projects through to production. This led to the decision to refocus on its battery metals assets and to invest in flexible energy projects including batteries and small-scale generation.
- Restructuring.** The company needed to restructure its balance sheet to reduce onerous debt and convertible equity balances. Significant new equity has been injected in the past year which has allowed net debt to equity to be reduced to 23% at the end of December 2019 from 79% at the end of June 2019. At the same time the company has used equity and cash raised from share placings to invest in new mining assets, gas-fired generation projects and utility-scale battery storage facilities.
- Mambare moves towards a mining licence.** Mambare, the large nickel laterite project in Papua New Guinea, is now progressing towards a mining licence with more survey work completed and a positive outcome recently announced from local regulatory hearings. The company also has an indirect economic interest in an arguably superior nickel project at Wowo Gap, and is developing a vanadium exploration opportunity in Canada.
- New management.** The board has been restructured to reflect the increased focus on flexible energy solutions while still retaining strong exploration, mining and production expertise. Recent energy acquisitions have introduced significant technical experience below board level.
- Short term cash flow expected to improve.** One and possibly additional energy projects are on target to make cash contributions in 2021 and there is healthy pipeline of further projects. This, together with cash balances from recent placings will underpin Corcel's ability to continue to invest in growth.

# CORCEL

Source: Company Information

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Please refer to important disclosures at the end of the document.

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## Investment Thesis

The newly rebranded Corcel is emerging from a year long period of intense restructuring and strategic realignment as a far lower risk investment than it was a year ago. While there is always risk associated with pre-production mining companies, Corcel's focus on its battery metals assets has aligned it with some of the fastest growing markets of the foreseeable future, namely electric vehicles and energy storage for transmission grids that increasingly have to evolve to accommodate inflexible renewable energy supplies.

The decision to focus on battery metals was taken alongside a strategic move towards investing in flexible grid solutions assets so that the company can generate stable cash flows in the short term from a portfolio of small-scale generation and utility scale battery storage facilities. This provides a useful hedge to the mining activities which are inevitably vulnerable to downward commodity price movements that ought to result in cheaper lithium ion batteries and faster adoption of the technologies that depend on them.

The newly refocused mining strategy has resulted in progress at the historic flagship nickel laterite project in Papua New Guinea. After a long period during which the project was on care and maintenance, the joint venture that owns the exploration licenses has reactivated the project, conducted ground penetrating radar surveys and have received positive feedback from the recent Warden's hearing. Mambare has the potential to be one of the major nickel and cobalt producers in the world, and nickel and cobalt are important constituents of lithium ion batteries that will increasingly be used in electric vehicles.

Corcel has recently acquired an economic stake in Wowo Gap, another large nickel laterite prospect in the region, which while smaller, has better grades, and it is seeking to identify synergies between the two projects. In addition, the company has invested in a potentially large source of vanadium in Canada and has recently announced that the 2020 field season had begun. A vanadium discovery in Canada might well supply materials for vanadium redox flow batteries that are ideally suited to the requirements of utility grid batteries.

In its new Flexible Grid Solutions business, Corcel has increased its stake in small-scale generation and storage operator, Allied Energy Systems from 80% to 100%. It has recently applied for a grid connection for a 7.2MW gas-fired generator and 2MW lithium ion storage plant at Southport. This will allow the company to offer peaking services to the grid and to buy electricity from the grid when prices are low. Once the grid connection, planning permission and site lease are finalized, construction is expected to take approximately six months.

Earlier this year, Corcel acquired a 50% stake in Weirs Drove Development for £25,000 in cash and a commitment to further investment as projects approached 'shovel ready' stage. The company is currently developing a 30MW battery storage project in Cambridgeshire. This too has the potential to be contributing to cash flow in the near future and is accompanied by a pipeline of additional generation and storage projects. Corcel retains an option to buy the remaining 50% of Weirs Drove Development.

The new management team reflects the need for experience in the legacy mining business with longstanding director Scott Kaintz as CEO, together with fresh perspective on the energy operations from the new Executive Chairman, James Parsons and the non-executive directors, Nigel Burton and Ewen Ainsworth.

The balance sheet is now less reliant on the support of expensive debt and convertible loan notes. New equity issues have allowed these to be swapped for a smaller issue of cheaper notes with no conversion rights. The issue of new equity has allowed Corcel to pursue its new strategy with further investments while providing sufficient financial overhead.

## Corcel

### Background

Corcel was founded in 2004 and originally admitted to AIM as Regency Mines in 2005 following a round of pre-IPO funding that raised £0.5m at 2p/ share. In the early days, the company was a pure mining investment house and had a number of option agreements over mineral exploration licences and exploration licence applications in Australia. Soon after listing, it acquired an iron ore project in Western Australia. In July 2005, this was spun off together with Regency's interests in manganese exploration in Australia to form the basis of the AIM-quoted Red Rock Resources, with the two companies having cross shareholdings and co-directors. Regency Mines initially held a 20.96% interest in Red Rock Resources which has subsequently been sold. It was around this time that the Company's focus on base metal exploration came into better view.

In May 2006, the company acquired a 75% stake in the 584 square kilometre exploration interest covering the Mambare Plateau in Papua New Guinea which it subsequently increased to 100%. Mambare had been explored for nickel laterite in the 1960s with fairly good results and soon this new project became the main focus of Regency's mineral exploration efforts. Regency subsequently brought in a new partner, Direct Nickel Pty Ltd, who brought with them a novel nickel processing technology particularly well suited to lateritic deposits.

As the prices of most metals generally faltered in the aftermath of the banking crisis in 2008, Regency became involved in subsequent years in a range of coal and oil and gas investments, largely seeking near term cash flows, which have subsequently been sold or disposed of. However, its interest in energy continues today through its investments in small scale UK generation and battery storage projects.

In November 2017, Regency formed a 100% owned subsidiary, ESTEQ Ltd, to act as the vehicle for development of opportunities in the battery storage and small-scale generation technology sector across the UK. It subsequently acquired an 80% interest in Allied Energy Services Ltd (AES) with a commitment to invest up to £250,000. The minority shareholders of AES brought with them a development pipeline, including land rights and connections for combined battery, gas and anaerobic digestion generation plants to be constructed and operated across the UK. Furthermore, the existing management team offered many years of experience in renewable energy, from procuring finance to finding key offtake partners.

Following a strategic review of operations that was announced in April 2019, Regency Mines announced that it would refocus around its mineral interests in nickel, cobalt and vanadium alongside the existing business in UK energy generation and storage. Its development interests in metallurgical coal and natural gas were classified as non-core for future realisation. The Board of Directors was reorganised in June 2019 and the company refocused on a battery metals and flexible energy solutions future. Regency Mines has now completed its balance sheet restructuring and rebranded as Corcel Plc. It has made significant additions to its investments in both its mining assets and its flexible energy solutions operations.

### Corcel's Battery Metals Mining Interests

Despite the recent expansion into generation and battery storage, Corcel is still very much involved in mining with several potential developments in nickel, cobalt and vanadium. Its focus on these battery metals runs alongside its interests in generation and storage and give it a useful hedge against the metal prices as well as access to near term cash flow.

The company has exposure to two nickel/ cobalt interests. The Mambare Project in eastern Papua New Guinea and the Wowo Gap Project which is located 150 km south east of Mambare. Corcel now owns 41% of Mambare through its 41% equity stake in Oro Nickel, a joint venture with Battery Metals Pty Ltd. Wowo Gap is 100% owned by ASX-listed Resource Mining Corporation Ltd (ASX:RMI) in which Corcel now owns A\$ 1.7m of the outstanding debt with an option to purchase a further A\$3m later this year, the Company also has a 50% interest in the Canadian Dempster Vanadium Project.

### Mambare

The Mambare Project has the potential to be one of the largest nickel producers in the world. Corcel (as Regency) acquired 75% of the exploration licence of a 584km<sup>2</sup> area in the Mambare Plateau in 2006 from a private entity. It increased its interest to 100% in 2008 and subsequently formed Oro Nickel Ltd, a 50:50 joint venture with a private Australian company, Direct Nickel Pty Ltd. (“DNI”), to develop the prospect. DNI is a developer of a unique lateritic nickel processing technology, and through the joint venture Oro Nickel has the rights to use this advanced nickel and cobalt extraction technology at Mambare. Between 2008 and 2011, Oro Nickel conducted exploration campaigns included 7,291m of drilling from 455 holes and 5 test pits, as well as ground penetrating radar (GPR) surveys.

Oro Nickel continued drilling in 2011 leading to a JORC resource estimate being released in early 2012. From 2013 until recently the project was run on a care and maintenance basis due to the general global downturn in the mining sector and broadly weak nickel prices. However, with less than 3% of Mambare’s 80 sq. km plateau tested by drill to date, the project potentially holds one of the world’s largest nickel laterite deposits. In 2018, DNI went through a corporate restructuring and realignment involving significant management changes, and subsequently Battery Metals Pty Ltd (“BMA”) became the successor entity and partner inside the Oro Nickel Joint Venture.

Recent survey activity in Mambare included the start in late 2019 of a ground penetrating radar programme that was subsequently completed during the first quarter of 2020 with 250-line kms of GPR accomplished. This completed most of the exploration work planned for this calendar year and Oro Nickel is currently deciding what results to have processed. Most of the latest work has been led by BMA and, in recognition of this, Corcel reduced its holding in the joint venture to 41% and paid its partner US\$50,000 in cash, 4.91m. new ordinary shares in Corcel and 4.91m, warrants exercisable at £0.01245. Combining the massive potential scale of the deposit and low-cost processing makes it a highly compelling value proposition. The joint venture partners are currently pursuing a mining lease, which would ultimately allow either a potential transaction and farm-in arrangement involving the project or a move to going directly into production through a direct shipping ore operation.

#### Mambare JORC Resource Estimate (2012)

	Laterite ore (Mtonne)	Nickel (%)	Cobalt (%)
Indicated	3.3	1.00	0.07
Inferred	159.2	0.94	0.09
<b>Total</b>	<b>162.5</b>	<b>0.94</b>	<b>0.09</b>
<b>Contained Metal (kt)</b>		<b>1,529</b>	<b>146</b>

Source: Company data

In July 2020, the company reported a positive outcome from the Warden’s Hearing for the Mambare asset. This represents an important milestone in the process of applying for a mining licence to conduct a direct shipping ore operation over a portion of the nickel-cobalt project, and is considered to be broadly analogous to local community planning approval in the UK. The Joint Venture understands that this is the first Warden’s Hearing approval for a mining lease in the province, and was pleased by the broad-based community support for the project. Currently, the Mambare joint venture partners are progressing renewal of the existing exploration licences in parallel to advancing the mining licence application, which is intended to take the project to a fundamentally new level of development.

### Wowo Gap

Wowo Gap has a long history of exploration dating back to the 1950s. It was purchased in 1996 by the predecessor to its current owners, Resource Mining Corporation Ltd. Exploratory diamond drilling found samples to contain between 1.2 and 1.7% nickel. An updated resource estimate in 2011, placed the Indicated and Inferred resource estimate at 125 m. tonnes at 1.06% nickel and 0.07% cobalt within the laterite profile based on drilling along the 12 km strike length.

Wowo Gap is located at the south eastern end of the Papuan Ultramafic Belt, a complex of peridotite, pyroxenite and gabbro which form the prominent east-west trending Didana Range, approximately 160km east of Port Moresby and 150km south east of Mambare.

The nickel mineralisation is associated with a laterite weathering profile developed over the underlying ultramafic geology which has resulted in the enrichment of nickel, cobalt, iron, chromium, magnesium and magnesite. A complete lateritic profile is preserved, with partial truncation associated with recent drainage systems. The depth of laterite weathering varies according to rock type and the degree of structural brecciation. The lateritic profile is typically 10 to 15 metres thick, occasionally more than 20 metres.

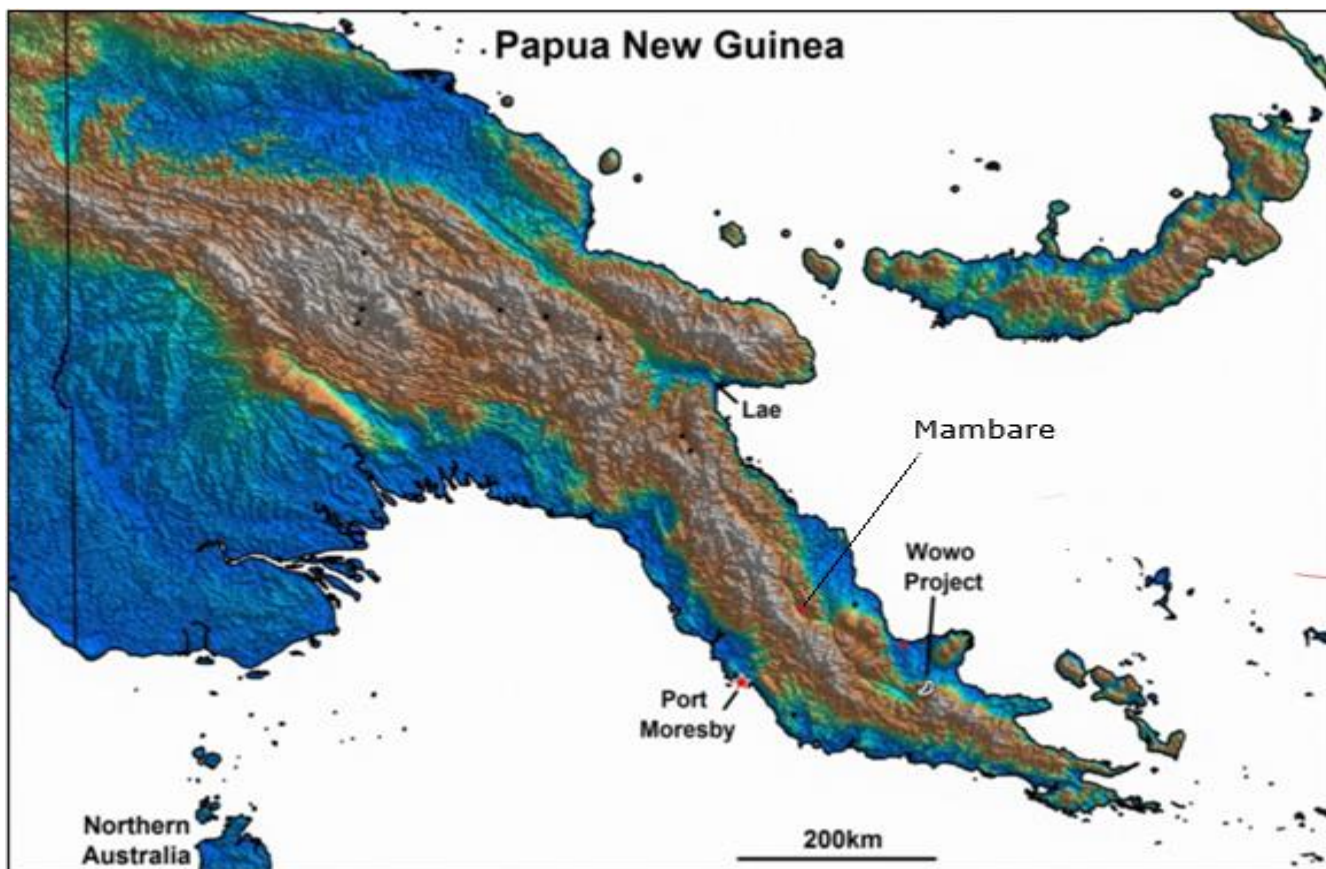
#### Wowo Gap JORC Resource Estimate 2011

	Laterite ore (Mtonne)	Nickel (%)	Cobalt (%)
Indicated	72	1.03	0.07
Inferred	53	1.09	0.06
<b>Total</b>	<b>125</b>	<b>1.06</b>	<b>0.07</b>
<b>Contained Metal (kt)</b>		<b>1,325</b>	<b>83</b>

*Source: Company data*

In April 2020, Corcel acquired A\$1.70m (£0.85m) of corporate debt in Resource Mining, from Hong Kong based Sinom Ltd. The debt was bought for £178,096 of cash and 13.3m new shares of Corcel, representing a 62% discount to the face value of the debt or, at full face value, an effective issue price of CRCL shares of 5p. The transaction gave Sinom an initial stake in Corcel of 7.9% as a locked-in cornerstone investor. In addition, Corcel has a six-month option to buy the balance of Resource Mining's debt on the same proportional terms which would result in its paying A\$640,000 in cash and 23.7m shares for A\$3.05m of debt. Following this investment, Corcel will initiate discussions with RMI on the potential synergies between the Wowo Gap project and Mambare and intends to further explore additional ways in which it can work together with its new investor, Sinom Ltd.

**Map of Papua New Guinea Showing Geographic Proximity of Mambare and Wowo Gap Projects**



Source: Resource Mining and Progressive Equity Research

**Dempster Vanadium**

In December 2018, Corcel announced that it had acquired an option to purchase a 50% interest in the Dempster vanadium project in Canada. Following a due diligence period, it exercised this option on 24 January 2019. The cost of the interest was C\$450,000 which was satisfied by the issue of 53.12m shares in Corcel.

The project includes 196 claims covering 40.96 km<sup>2</sup> with up to a 20km potential strike. All of the property lies alongside the Dempster Highway, some 65km north of the Eagle River Lodge, in the Northern Yukon, Canada. This area has excellent infrastructure, highways and access to ports and logistics.

The initial goal of the project was to further identify and exploit vanadium in black shales, a potentially ideal source of material for the battery metal markets. Previous work on the project was focused primarily on nickel, and it was from existing drill-holes that vanadium results were identified at 0.26% V<sub>2</sub>O<sub>5</sub> in roadcut.

As we go to press, the company has announced that it had mobilised the geological team to deliver the field programme at the project. The exploration team, provided by Corcel’s local technical consultant, Breakaway Exploration Management Inc., will spend up to ten days on-site to conduct a soil geochemical survey to define drill targets focused on a 3km segment that has previously had no exploration work done.

Later tests indicated that the shales underlying the property contain significant vanadium over broad stratigraphic intervals. The best results include 0.39% V<sub>2</sub>O<sub>5</sub> over 75.9m, 0.32% V<sub>2</sub>O<sub>5</sub> over 38.2m and 0.39% V<sub>2</sub>O<sub>5</sub> over 90.16m. These intersections are comparable to grades and thicknesses for similar deposits currently being explored both in Canada and the United States, and demonstrate potential to host an economic deposit of vanadium. The company has approved a further exploration season to begin in August 2020 which will focus on a 3km segment where no soil samples have been collected previously. Additionally, a suite of core pulps from drill cores inherited on the project will be re-analysed focusing on major oxides and carbon levels, as both are considered significant indicators of elevated levels of vanadium.

The objective of the 2020 field season is to generate drill targets in order advance the project towards a formal resource starting in 2021.

## Flexible Grid Solutions

### Flexible Grid Solutions

Flexible Grid Solutions (ex EsTeq) ("FGS") is a 100% owned subsidiary of Corcel through which it owns and operates its flexible electricity generation and energy storage activities. FGS was formed in 2017 to pursue opportunities and consolidate several of Corcel's interests in battery storage and small-scale generation technology. In 2018, FGS acquired 80% of Allied Energy Services Ltd, a small-scale private generation and energy storage developer. This was rapidly increased to a 100% holding in 2020 and forms one pipeline of project generation and development.

In December 2019, FGS announced that it had signed a memorandum of understanding with ion Ventures Ltd. (IV), an investor in and developer of energy storage and flexibility assets. Under the terms of the agreement both parties will cooperate on FGS' existing pipeline of projects, with a view to identifying and prioritising the most commercially attractive, securing funding and then moving quickly to first cash flow. IV will initially provide support on a consultancy basis and will be issued shares in Corcel as consideration. It is expected that IV will become a long-term strategic partner to the Company, supporting the development of the UK energy storage business, and adding key technical expertise to the FGS development team.

### Weirs Drove Development

In June 2020, FGS purchased a 50% interest in Weirs Drove Development Ltd (WDD), a debt-free, privately-owned developer of energy storage and solar projects in the United Kingdom advancing a 30 MW battery storage facility in Burwell, Cambridgeshire. The initial consideration was a £25,000 cash payment with an agreement to extend a further £100,000 by way of a shareholder loan once the Burwell site has met all shovel ready criteria which include a grid connection offer, full planning permission and an executed site lease, all of which were expected in the near-term. The loan is repayable on financial close of the Burwell project which is expected to be later this year. A demand side response aggregator, Limejump Ltd. which is owned by Shell New Energies has agreed to provide a route to market and to trade Burwell's storage capability for revenue. Once funding is secured at the project level, construction is expected to take approximately six months and energization of the site could occur in early 2021.



FGS also secured an option to buy the remaining 50% of WDD at a price of £30,000 per fully operational megawatt of energy storage or production, at the time of option exercise, to be paid 50% in cash and 50% in new ordinary shares of the company. The option is exercisable at the sole election of Corcel and becomes exercisable following WDD commissioning at least 40MW of installed energy storage or energy production capacity.

A deferred option consideration of £5,000 per MW on the next 100MW of installed capacity would also become due after reaching that metric, also payable 50% in cash and 50% in shares if triggered. The entire equity component of the option and deferred consideration, should the option be exercised at the Company's discretion, will be priced at the 30-day VWAP prior to exercise.

In addition to Burwell, there are several other near shovel-ready projects in the WDD portfolio, including several ancillary sites in the Cambridge region, and several of differing sizes and levels of development across the UK.

## Financials

### Balance Sheet and Corporate Restructuring

The key moment in the recent financial history of Corcel was in December 2019 when the new Board announced a major debt restructuring, equity fundraising and consolidation of equity along with the appointment of a new Executive Chairman. This followed a period of strategic review that was initiated in June 2019 when Nigel Burton and Ewen Ainsworth were appointed to the Board as Non-executive Chairman and Non-executive Independent Director respectively. At the same time, long-standing board member, Scott Kaintz, was appointed as Chief Executive Officer.

The result of the strategic review begun in June 2019 was announced in July of that year and it was concluded that the company would divest itself of its non-battery metal related mining investments and focus on nickel, cobalt and vanadium projects, as well as continuing to develop its flexible grid solutions business.

At the same time the company proposed to raise £831,000 by way of a placing of 3.02m. 0.01p new ordinary shares at a price of 0.0275p per share. Alongside the placing, the company issued by subscription an additional 530.0 m shares, representing obligations of £145,758.30, to Red Rock Resources in full extinguishment of outstanding obligations.

Institutional holders of a loan note issued by the company in June 2018 to fund its coal joint venture agreed to swap the remaining balance in return for new loan notes and equity in Corcel resulting in the issue of 2596.4m new shares. The new loan notes, valued at £286,756, carry a lower (8%) interest rate and have no conversion rights.

Holders of £0.282m of the outstanding £0.676m of Convertible Loan Notes, first issued in January 2019, agreed to convert these obligations into 1,022.2m new Regency (now Corcel) ordinary shares at a price of 0.0275p per share. The terms of 88,015,874 warrants, originally issued to the Convertible Loan Note holders, were varied, and the new terms of these warrants allow exercise into new ordinary shares of the company at a price of 0.055p for a period of 36 months. Holders of a further £0.44m of the convertible loan notes, agreed to extinguish the balance of these notes and to subscribe for an equivalent amount of the new loan notes described earlier. A small residual balance of convertible loan notes, representing £30,000 of principal, were paid by the company in May 2020 on the existing convertible loan note terms, and the warrants associated with these notes will remain in place under the existing terms.

The total number of shares issued under all of these arrangements including transaction shares, placing shares, subscription shares, loan note conversion shares and convertible note conversion shares was 7170.4m. There followed a 100 for 1 consolidation of the outstanding ordinary shares.

The Company was left with substantially reduced net debt with net debt/equity falling from 79% at the end of June 2019 to 23% at the end of December 2019. There was an outstanding debt balance following the issue of the new loan notes of £0.73m which is now held by two institutional investors, however they have both granted an option to purchase this debt to C4 Energy Ltd., a private company associated with the Chairman of Corcel, James Parsons.

Following the restructuring and share consolidation there were 86.9m shares in issue but the pace of activity in the first half of the current calendar year has resulted in this rising to 189.9m. These issues are summarised in the next table and explained in detail elsewhere in this report.

#### Shares Issued Since the Balance Sheet Restructuring

Date	Shares issued (m)	Purpose of issue
01/01/2020	86.87m	Opening total
03/01/2020	2.46	Buyout of 20% of Allied Energy Services
31/01/2020	0.48	Historic Director payments and awards
07/04/2020	4.91	Resolution of Mambare partner dispute
07/04/2020	13.29	Partial consideration of Wowo Gap debt acquisition
07/04/2020	58.70	Placing to raise £470,000 at 0.008p/ share
21/04/2020	0.82	Company Share Incentive Plan (SIP)
19/06/2020	22.00	Weirs Drove Consideration
30/06/2020	189.91m	Closing total

Source: Company Announcements

## Income Statement and Cash Flow

The group income statement for the last two full financial years has been dominated by asset impairment charges as the company began its reorganisation to embrace a battery metals and flexible energy future. The latest published six months results to the end of December 2019 indicated that this restructuring and write down of assets was now largely complete with the reported loss before tax of £0.62m being due to administration costs and finance charges. Similarly, recent cash flows have been heavily influenced by the restructuring due to the need to dispose of non-core assets and issue shares to reduce company debt. However, in the first half of the current financial year ending December 2019, net cash outflow from operations was £176,000 compared with an outflow £270,000 in the previous year. The second half of the year will see the benefit of two share placings to raise a total of £680,000 partly offset by the cash component of acquisitions of around £245,000. In addition, we expect cash flow from the energy assets to begin early in calendar 2021. In our view, the company is well-placed to pursue its ultimate restructuring objectives of advancing and commercialising its mining assets and expanding its energy storage and production portfolio.

## Valuation

The Company's main assets at present remain its mining interests, and particularly Mambare. At the end of December 2019, these were in the Balance Sheet at £1.95m. The NAV of the company at that stage was £3.13m, which represents a significant premium to the current market value of £1.67m. Clearly this takes account of the risks that are inherent in early stage mining operations but, as we have pointed out, Mambare is now moving towards getting a mining licence following the resumption of exploration activities in PNG.

Comparing Corcel with similar companies is not easy because there are so few of them, but Horizonte Metals (AIM:HZM, TSX:HZM), a UK and Toronto-listed company with nickel interests in Brazil, is one such company. It is notable that Horizonte has an EV/ resource valuation seven times higher than that of Corcel.

### Peer Company Comparison

Peer Company	Indicated and Inferred Ni (Mt)	EV (US\$m)	EV/ Resource (US\$/c/ lb Ni)	Location of Project
Horizonte Minerals	1.29	40.44	1.425	Brazil
Corcel	0.63	0.87	0.063	PNG

Source: Progressive Research

In fact, on the most pessimistic assumptions for the in-situ value of the Mambare project provided by the Company, it is valued at twice the current market value of the whole of Corcel, equivalent to share price of 1.68p/ share, and completely discounting its other mining assets and its flexible grid solutions businesses.

In Situ Valuation of the Mambare Ni Laterite Project (£m)									
Resource Size (Mt)		Corcel in situ valuation (US\$/ lb nickel)							
		Resource Definition			Prelim, Econ Assessment			Bankable Feasibility Study	
Mambare (100%)	Corcel share (41%)	\$0.003	\$0.01	\$0.02	\$0.03	\$0.04	\$0.06	\$0.08	\$0.1
150	61.5	3.2	10.6	21.2	31.8	42.4	63.6	84.8	106.0
180	73.8	3.8	12.7	25.4	38.2	50.9	76.3	101.7	127.2
210	86.1	4.5	14.8	29.7	44.5	59.4	89.0	118.7	148.4
300	123	6.4	21.2	42.4	63.6	84.8	127.2	169.6	212.0

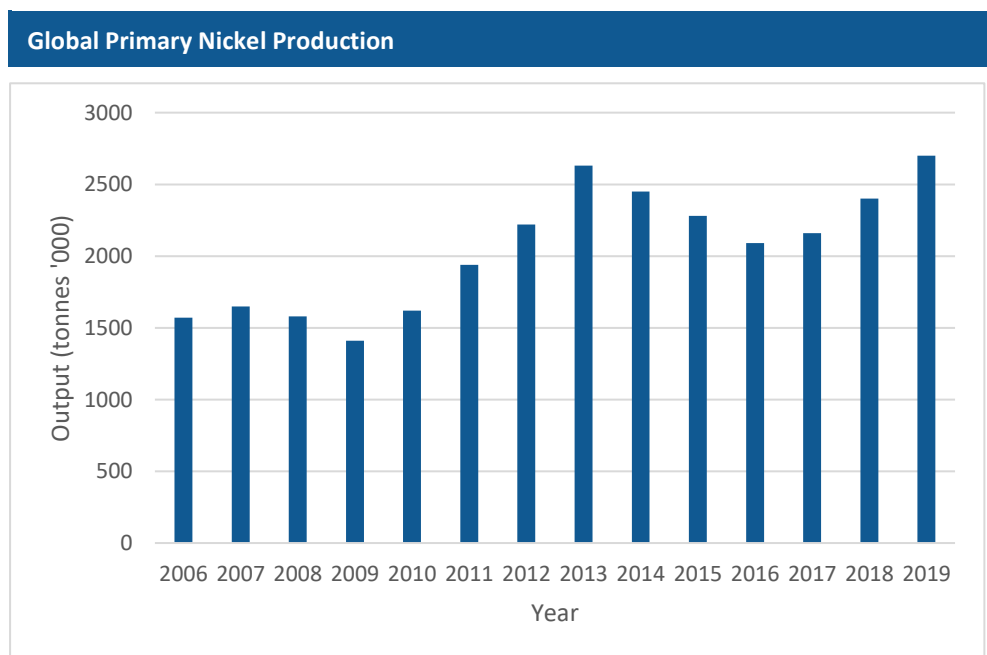
Source: Company Data

## Corcel Key Markets

### Nickel

Nickel is the fifth most common element on earth and it occurs in nature principally as oxides, sulphides and silicates. It is often found with deposits of cobalt. The USGS (United States Geological Survey) estimates that there are global reserves of 90 - 100 m tonnes and resources of a further 200m tonnes. Nickel ores are mined in about 33 countries on all continents, and are smelted or refined in about 30 countries. Annual production of primary nickel is around 2m tonnes, the majority of which is processed from nickel laterite, laterite ores are formed as a result of surface erosion of igneous rocks in tropical climates and generally contain 1-2% nickel.

Nickel is readily recycled in many of its applications, and large tonnages of secondary or "scrap" nickel are used to supplement newly mined ores. Annual usage of the metal is therefore over 30m tonnes with a high proportion being recycled. The biggest producers of nickel are the Philippines, Russia, Canada, New Caledonia, Australia, Indonesia, Brazil, Cuba and Colombia

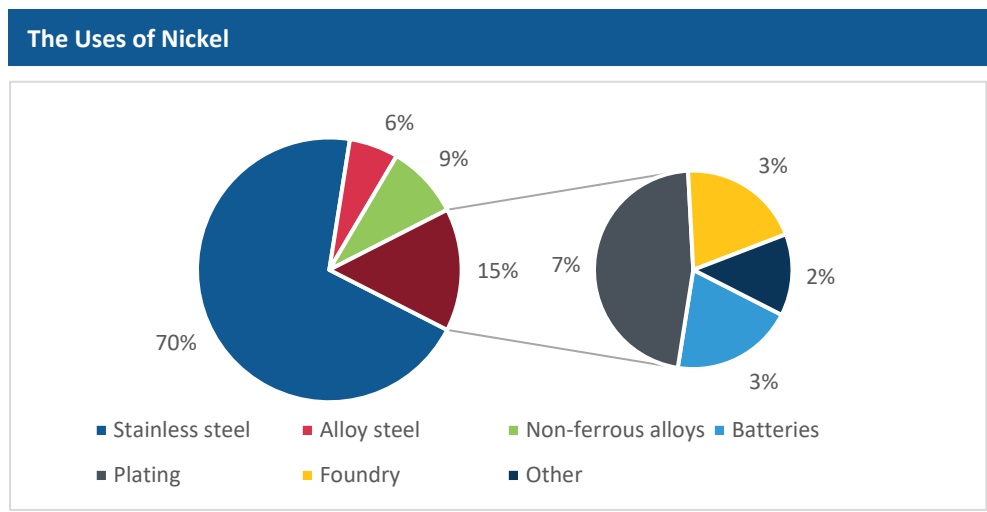


Source: The World Nickel Factbook 2019

### Uses of Nickel

Nickel is mainly used in the production of stainless steel and other alloys which can be found in a wide range of industrial and commercial applications. However, there is a growing demand for nickel in battery cells. Initially, this was restricted to nickel cadmium (NiCd) batteries, but the longer-lasting nickel metal hydride (NiMH) rechargeable batteries, came to the fore in the 1980s and were subsequently adopted in a wide range of portable devices like power tools and cameras. The mid-1990s saw the first significant use of NiMH batteries in electric vehicles in the Toyota Prius. Around the same time, the first commercial applications for Li-ion batteries emerged, initially in camcorders and eventually finding their way into smartphones, laptops and the numerous other portable devices. Lithium ion batteries contain significant quantities of nickel and cobalt and are expected to be at the forefront of the anticipated increase in demand for electric vehicles in the next 20 years.

The major advantage of using nickel in lithium ion batteries is that it helps deliver higher energy density and higher cycle life than NiMH batteries at lower cost. Further advances in nickel-containing battery technology mean it is set for an increasing role in electrical grid energy storage systems. These make energy production from intermittent renewable energy sources such as wind and solar a more viable replacement for fossil fuels. Depending on the type, nickel can constitute between 30 and 70% of the metal in Li ion batteries.



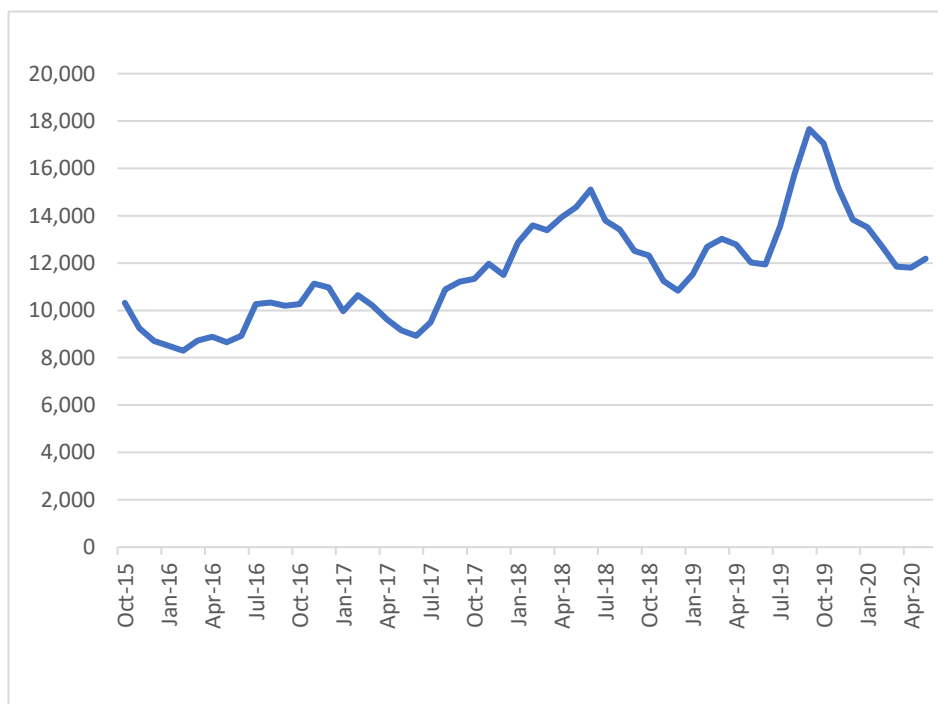
Source: World Nickel Factbook, 2019

### The Nickel Price

The nickel price has been volatile in recent years, reaching an all-time high of just over US\$50,000/ tonne in 2007 before falling back sharply in the wake of the banking crisis to less than US\$10,000 in 2009. More recently it has traded between US\$10,000 and US\$18,000/ tonne. There was significant volatility in 2019 as a result of Indonesia’s decision to ban the export of nickel ores from the beginning of 2020. Indonesia was the largest global exporter of nickel ore but in an attempt to develop its own smelting and primary production operations it has often imposed export bans on raw ore. The country first introduced the nickel ore export ban in 2014, causing a price surge at the time, then relaxed it in 2017 under a quota system before putting in place the latest ban. The Indonesian ban and COVID-19 fears resulted in a near 20% fall in the price of nickel from the beginning of 2020 to a low of US\$11,311/tonne at the end of March. It has since recovered sharply to reach US\$13,472/tonne.

As Oro Nickel is developing the Mambare project as a direct shipping ore (DSO) operation, it is also worth considering the price of laterite ore. For grades above 1.6% this is currently around \$30/ tonne. For lower grades of around 1% it is \$15/ tonne.

### The Global Nickel Price( US\$/ tonne)



Source: Platts

## Cobalt

Cobalt is a chemical element with the symbol Co and atomic number 27. Like nickel, cobalt is only found in the Earth's crust in chemically combined form, save for small deposits found in alloys of natural meteoric iron. The free element, produced by reductive smelting, is a hard, lustrous, silver-grey metal. It is not a particularly rare metal, ranking 32<sup>nd</sup> in global abundance. However, it is widely dispersed in the earth's crust and is found in a variety of different ores in several countries. Cobalt is only extracted alone from the Moroccan and some Canadian arsenide ores. It is normally associated as a by-product of copper or nickel mining operations. Around 55% of the world cobalt production comes from nickel ores.

Annual production of cobalt was around 110,000 tonnes in 2017 and the USGS estimates world reserves of cobalt at 7.1m tonnes. The Democratic Republic of Congo (DRC) currently produces 63% of the world's cobalt. This market share may reach 73% by 2025 if planned expansions by mining producers like Glencore Plc take place as expected. However, it has been estimated that by 2030, global demand could be 47 times more than it was in 2017 (Bloomberg New Energy Finance).

The reason for this projected expansion is the role that cobalt plays in rechargeable batteries where it generally constitutes part of the cathode. Until recently there were few industrial and commercial uses for cobalt which is why it was extracted principally as a by-product of nickel and copper mining and smelting. This has changed substantially in recent years with demand for cobalt in batteries taking off. Cobalt is an important component in the stability of lithium ion batteries. It is also used in nickel metal hydride batteries. Demand for electric vehicles will ensure that demand for cobalt continues to increase.

Lithium Ion Battery Types			
	Battery Type		
	Lithium Cobalt Oxide	Lithium Nickel Cobalt Aluminium Oxide (NCA)	Lithium Nickel Manganese Cobalt Oxide (NMC)
<b>Cathode material</b>	LiCoO2	LiNiCoAlO2	LiNiMnCoO2
<b>Voltage (V)</b>	3.7-3.9	3.65	3.8-4.0
<b>Specific energy (capacity Wh/Kg)</b>	150-240	200-300	150-220
<b>Cycle life</b>	500-1000	500	1000-2000
<b>Thermal runaway (°C)</b>	150	150	210
<b>Applications</b>	Mobile phones, tablets, laptops, cameras	Medical devices, electric powertrain, industrial	E-bikes, medical devices, electric vehicles,

Source: The Cobalt Institute

The price of cobalt has also exhibited considerable volatility in recent years, rising sharply for two years to peak at US\$ 93,750/ tonne in September 2018 before falling back to a low of US\$26,000 a year later. The metal has traded in the range US\$27,500 – US\$37,000 for the past year.

## Vanadium

Vanadium is a hard, silvery-grey malleable metal that is rarely found in its pure elemental form in nature. Once it is isolated artificially it reacts rapidly with atmospheric oxygen to form an oxide layer around the free metal.



Vanadium occurs naturally in about 65 mineral and fossil fuel deposits. It is produced in China and Russia from steel smelter slag. Other countries produce it either from magnetite ore directly, flue dust of heavy oil, or as a by-product of uranium mining. It is mainly used to produce specialty steel alloys such as high-speed tool steels. Its use as a hardening agent in steel has become more important in recent years as Chinese building specifications have required higher vanadium content in construction steel. The most important industrial vanadium compound, vanadium pentoxide, is used as a catalyst for the production of sulphuric acid. However, the vanadium redox battery could be an important future application for energy storage.

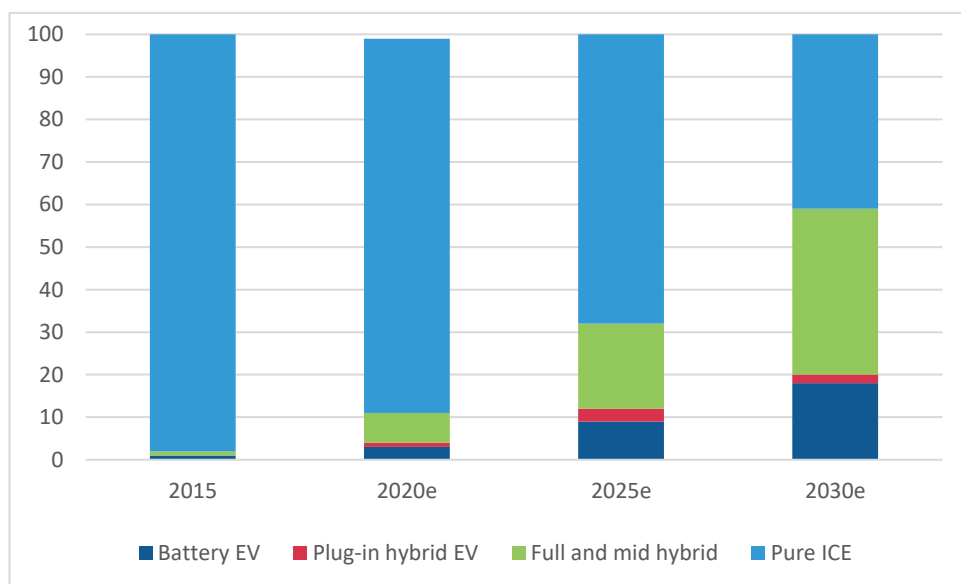
The vanadium price has experienced similar volatility to that of other battery metals in recent years with ferrovandium having peaked at US\$120,000/ tonne in 2018 and now trading at an average of US\$30,000/ tonne.

## Electric Vehicles

One of the main drivers behind the expected increase in demand for battery metals is the growth in electric vehicles. Car manufacturers are preparing to phase out cars powered solely by internal combustion engines (ICEs) as governments look to reduce fuel emissions. The growth in battery electric vehicles (BEVs) and hybrid electric vehicles (HEVs) is rising and by 2025, EVs and HEVs will account for an estimated 30% of all vehicle sales. In 2016 just under 1 million vehicles or 1% of car sales came from plug-in electric vehicles (PEVs).

By 2025, J.P. Morgan estimates this will rise close to 8.4 million vehicles or a 7.7% market share. While this jump is significant, it doesn't compare to the kind of growth expected in HEVs - cars that combine a fuel engine with electric elements. This sector is forecast to swell from just 3% of global market share to more than 25 million vehicles or 23% of global sales over the same period. This leaves pure-ICE vehicles with around 70% of the market share in 2025, with this falling to around 40% by 2030, predominantly in emerging markets.

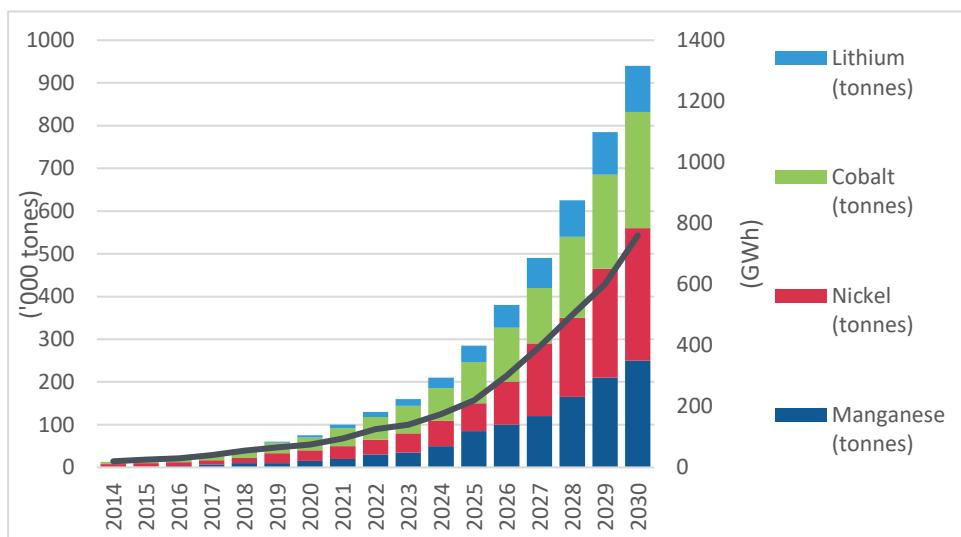
**The Changing Mix of Vehicle Propulsion Systems**



Source: J.P.Morgan

A recent study by Bloomberg New Energy Finance estimates that the amount of electricity required for electric vehicles will increase over ten-fold between now and 2030. This will have a significant impact on demand for battery metals like nickel and cobalt. The increase demand on nickel alone is equivalent to 15% of current global primary production.

### The Expected Growth in Demand for Battery Metals



Source: Bloomberg New Energy Finance

Against this trend is the anomaly that the cost of batteries for electric vehicles are expected to fall significantly, which is often given as one of the key drivers for growth. The reason for this is that the metal component of the cost of batteries for electric vehicles is just 27% of the total. As manufacturing efficiencies increase and economies of scale take effect, it is expected that the cost of the metal component of the battery will be in the range 55 – 60 %. In our view there is no doubt that given the enormous increase in demand for battery metals forthcoming, prices will be buoyant over the next decade.

## Utility Scale Battery Storage Demand

### A New Market for Battery Metals

In addition to the growing demand for batteries in electric vehicles, demand for nickel, cobalt and vanadium is likely to be driven by the increasing trend towards employing batteries in electricity transmission and distribution systems

More than 25% of UK generation capacity now comes from renewable sources resulting in electricity supply being less flexible and more intermittent than ever before. This presents an increasing challenge for the transmission system which connects power generation plants to local distribution networks. National Grid is the UK's transmission system operator (TSO), responsible for balancing supply and demand while maintaining voltage and frequency within tightly defined limits. To do that, it needs to be able to access flexible generation in near real time and it contracts in advance for a range of ancillary services, including short-term operating reserve (STOR), enhanced frequency response (EFR) and voltage control.

If the increased demand for ancillary services is not met it will significantly delay the move towards a low or zero carbon-based energy economy. The UK regulator has recently announced its draft proposals for the next gas and electricity transmission price controls (RIIO-2) and has called for £25 bn of additional expenditure to upgrade the UK's energy networks over the next 5 years. Batteries look increasingly likely to play a larger role in transmission network operation. According to Cairn Energy Research, the global stationary energy storage market will grow from 3.7 GWh in 2018 to 8 GWh in 2020. By 2027, the market is expected to grow to 87.7 GWh.

## **Grid Balancing Services**

The bulk of power is still traded in long-term contracts, but ancillary services that deal with power quality are becoming more important. They are paid for by grid users in the form of Balancing Service Use of System charges and are calculated daily.

Among the 15 balancing services that are listed by national grid, frequency response services are becoming more important. Because solar and wind generation have far less inertia than the large turbines used by coal, gas and nuclear power plants, grid frequency changes faster when demand and supply are out of balance. If frequency changes too quickly, it trips protection relays at the generation plant. Really fast frequency changes have the potential to uncontrollably disconnect large chunks of generation, causing parts of the grid to shut down.

## **Enhanced frequency response**

An increasingly important balancing service is enhanced frequency response (EFR) in which the National Grid rapidly pumps large quantities of energy into the grid in order to maintain an output frequency of 50Hz. Ideally, the response time needs to be less than 500ms. In the past, National Grid has been able to control most frequency issues with Firm Frequency Response (FFR), largely provided by employing gas-fired spinning reserve. These are gas-fired generation plants that can be switched from zero to full load in 10 to 30 seconds. However, to achieve the sub-second response times required by the introduction of the new green technologies, batteries offer a more reliable alternative. Lithium ion batteries offer a 20ms response time and can also participate in the STOR and capacity markets by charging at times of low electricity demand and discharging at times of high demand.

National Grid's first tender for 201MW of EFR capacity was held in 2016 and was awarded in 8 tranches at a price of between £7 and £12/ MWhr. Although at the time this was regarded as a low price, it encouraged a big increase in investment in utility scale storage with over 3GW in the planning system. Over 95% of the current battery storage capacity is Li ion technology. Of the 1,137MW that pre-qualified for the EFR tender, 888MW was for Li-ion battery projects.

## **STOR, Capacity and Peak Shaving.**

Most electricity is traded on long-term contracts at stable prices. However, marginal prices can be very volatile and this can make peak balancing potentially expensive for the TSO. Contracted reserve short term generation and batteries can be employed to smooth out the peaks in demand for electricity and reduce the exposure to high spot prices. These can also participate in the capacity market in which generators are paid to bring generation capacity online at some time in the future. The Foresight Group 35MW Port of Tyne project has a 4 year EFR contract and a 12 year capacity contract. However, due to their relatively short discharge times, Li ion batteries are more suited to the short burst requirement of frequency response than the longer term demands of capacity shaping.

**The Day Forward Price of Electricity (£/ MWh)**



Source: Ofgem

Vanadium redox-flow batteries are a viable option for large scale storage and STOR because they are able to provide hundreds of megawatt hours at grid scale for relatively long durations. They can be charged thousands of times without losing capacity, while holding large amounts of energy. Under the right circumstances, these batteries could replace natural gas and diesel generation as short-term operating reserve.

Lithium-ion batteries currently constitute about 95% of energy storage projects today, but as wind and solar become larger parts of the generation mix, the demand for large-scale, long-duration solutions that can last 20 years will be necessary.

## Management biographies

### James Parsons – Executive Chairman

In addition to his role as Executive Chairman of Corcel Plc, James is currently Executive Chairman of Ascent Resources Plc and Non-Executive Chairman at Echo Energy Plc and Coro Energy Plc. James has over 20 years' experience in the fields of strategy, management, finance and corporate development in the energy industry. He started his career with the Royal Dutch Shell Group where he spent 12 years working in Brazil, the Dominican Republic, Scandinavia, the Netherlands and London. James was previously Chief Executive at Sound Energy Plc for 8 years, is a qualified accountant and has a BA Honours in Business Economics.

### Scott Kaintz - Chief Executive Officer

Scott Kaintz has a degree in Russian Language and Russian Area Studies from Georgetown University and MBA degrees from London Business School and Columbia Business School. He started his career as a US Air Force Officer and analyst working across Europe, the Middle East and Central Asia. Scott has held operational and managerial roles in the defense industry and worked in corporate finance and investment funds in London, focusing primarily on capital raising efforts and debt and equity investments in small-cap companies. He joined Corcel in 2011 in a Corporate Finance role and has subsequently become an Executive Director. Scott Kaintz is also a Non-Executive Director of Red Rock Resources Plc, listed on AIM, and an Executive Director of Curzon Energy Plc listed on the Standard List of the London Stock Exchange.

### Nigel Burton - Non-Executive Director

Dr Nigel Burton has over 30 years' experience in operational and financial management, debt and equity financing, acquisition and integration of businesses, disposals, IPOs and trade sales. Following over 14 years as an investment banker at leading City institutions including UBS Warburg and Deutsche Bank, Nigel spent 15 years as Chief Financial Officer of a number of private and public companies including Management Resource Solutions Plc and Nu-Oil and Gas Plc. Nigel is currently Non-Executive Chairman of Remote Monitored Systems Plc and a Non-Executive Director of Digitalbox Plc and Tau Capital Plc, all of which are listed on AIM. Nigel is a Chartered Electrical Engineer and a Past President of the IET. He has a B.Sc. (First Class Hons) in Electrical and Electronic Engineering and a Ph.D in Acoustic Imaging from University College London.

### Ewen Ainsworth - Non-Executive Director

Ewen is an experienced AIM company director. He is currently a Non-Executive Director of Ascent Resources Plc and CEO of Discovery Energy Limited, an advisory, consultancy and investment company, and has worked in a variety of senior and board-level roles in the natural resource sector for over 30 years, most recently as Finance Director for Gulf Keystone Petroleum Ltd. He qualified as a chartered management accountant, before moving into leading commercial roles. He holds a degree in Economics and Geography from Middlesex University, and is a member of the Energy Institute.

## Risks

Risk Assessment and Mitigation		
Risk	Risk/impact	Management action/comments
<b>Exploration and project development risk</b>	Mineral exploration, evaluation and project development are speculative activities. There is no certainty that Regency will proceed to the development of any of its projects or otherwise realise their full value.	The Group aims to mitigate this risk when evaluating new business opportunities by targeting areas of potential where there is at least some historical drilling or geological data available and where leading exploration consultants believe there is strong evidence of world class mineral deposits.
<b>Resource risk</b>	All mineral projects have risk associated with defined grade and continuity and are always subject to uncertainties in the underlying assumptions, which include geological projection and commodity price assumptions. This may include variations in the style of mineralisation encountered as well as the failure to achieve economic deposits	Mineral Reserves and Resources are calculated by the Group in accordance with accepted industry standards and codes
<b>Environmental risk</b>	Exploration and the development of a project can be adversely affected by environmental legislation and the unforeseen results of environmental studies carried out during evaluation of a project.	Any disturbance to the environment, during exploration on any of the licence areas, will be rehabilitated in accordance with the prevailing local regulations
<b>Finance and Liquidity risk</b>	The Group has an ongoing requirement to fund its activities through the equity capital markets. There is no certainty such funds will be available when required by the business. To date, the Group has managed to raise the required funds, primarily through equity placements and various debt facilities, including Promissory Notes and Convertible Loan Notes. The cost of available capital may fluctuate significantly and can include high interest rates and the requirement to offer new equity at a discount to current prices. The Company can be affected by international financial markets and risk appetites, low projections of future world GDP growth may depress commodity prices and perceived future levels of demand. Supply and demand of individual commodities may also impact valuations of current and future resources and projects in the Group portfolio.	Corporate finance planning and analysis facilitates multiple avenues to acquire capital and assists in lowering overall finance costs. Expansion of capital reserves and cost reduction efforts provides the Company with additional resilience during sector downturns. The Directors prepare cash flow forecasts for at least the next 12 months ahead and are confident that the Company can raise additional equity funds, if required. The Directors have put in place a framework of controls to ensure as far as possible that ongoing financial performance is monitored in a timely manner, that corrective action is taken and that risk is identified as early as practically possible, and they have reviewed the effectiveness of internal financial controls.
<b>Political risk</b>	All countries carry political risk that can lead to interruption of project activities. Politically stable countries can have enhanced environmental and social risks, risks of strikes and changes to taxation, whereas less developed countries can have, in addition, risks associated with changes to the legal framework, civil unrest and government expropriation of assets.	The Company has working knowledge of the countries in which it holds exploration licences and has appointed experienced local operators to assist the Company in its activities in order to help reduce possible political risks wherever possible.
<b>Regulatory risk</b>	The risk from changes in obligations arising from operating in markets which are subject to a high degree of regulatory, legislative and political intervention and uncertainty	There is regular engagement with the Board and Group Executive Committee on political and regulatory developments which may impact Corcel's operations or strategy.

Source: Company Report & Accounts

**Disclaimers and Disclosures**

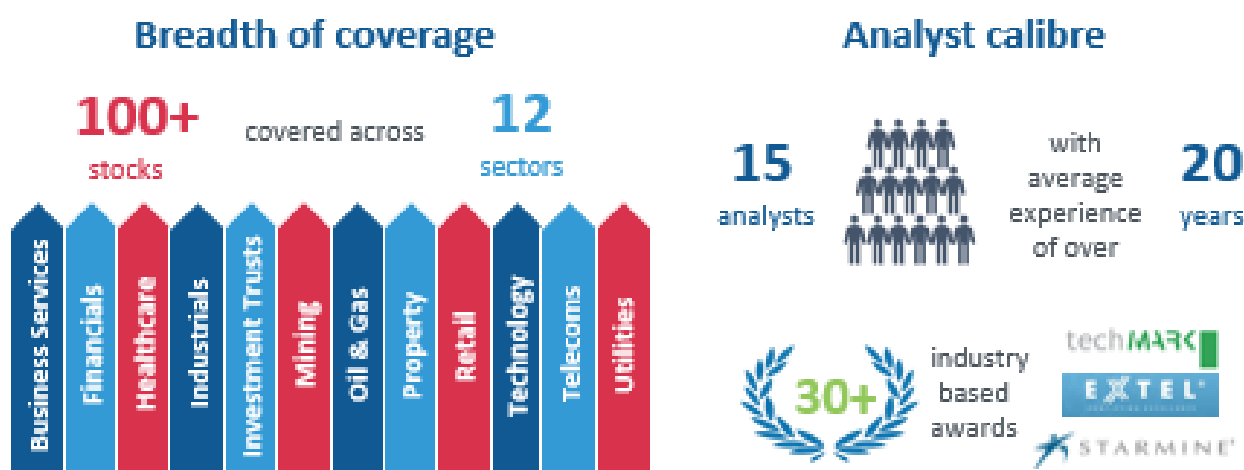
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