



An investment case study: Birmingham Bio Power Limited





Katia Brisson and Ian Gaunt discuss Gravis's investment in Birmingham Bio Power Limited.

Key take-outs:

- A 10.2MW waste wood biomass plant using 70,000 tons of waste wood annually to power 10,000 homes
- Benefits from renewable obligation certificates, long-term power purchase agreements, and private wire supply to Tyseley Energy Park
- Prevents waste wood from going to landfill, reducing methane emissions, and supports sustainable forestry's carbon cycle
- Inflation-linked, governmentbacked returns, with low correlation to broader economic conditions

Why did you choose to add Birmingham Bio Power Limited to the portfolio?

Birmingham Bio Power Limited is a 10.3megawatt waste wood biomass plant. It was one of the first to be developed in the UK, and commercial operations began in 2016. It uses around 70,000 tons of waste wood per year and has enough capacity to generate renewable electricity to power around 10,000 homes. The project benefits from long-term public sector-backed, inflation-linked revenues in the form of renewable obligation certificates.

Gravis initially invested in 2013, with a senior loan that provided 50% of the money needed to fund the construction of the project. The remaining 50% was provided by the UK Green Investment Bank as it was called at that time.

Following technical challenges during construction and also during early operation, the Birmingham Bio Power Limited Company entered administration in June 2020. This nine-month process was initiated and also led by Gravis. In March 2021, Birmingham Bio Power Limited exited administration, with Gravis as sole equity holder.



How does an investment like BBPL make revenue for GCP Infrastructure Investments?

Birmingham Bio Power uses waste wood gasification. This is classified by Ofgem as being an advanced combustion technology or ACT. Being an ACT allows the project to receive 1.9 renewable obligation certificates per megawatt hour of eligible output.

This project also benefits from the sale of electricity to end users under a 15-year power purchase agreement, and has also developed a private wire on-site with its landlord, the Tyseley Energy Park, so it also receives the revenue from the sale of electricity to the landlord.

How does this asset fit in with the wider GCP Infrastructure Investments portfolio?

The biomass sector represents about 10% of the portfolio. Since 2013, we have invested in four biomass projects located in the UK. The total capacity is approximately 70 megawatts, which can power around 70,000 homes.

What involvement does Gravis have on a day-to-day basis?

We are typically on site one or two days a week, when we'll talk with the plant manager and other members of the management team. We have access to real-time metering data, so we're able to hold the operation and maintenance contractor to account and see what prevailing risks we're running with on a short, medium, or long-term basis. We discuss mitigation strategies, outage scopes, timings, etc.

We are also privy to any accident or incident reports, and can discuss the root cause analysis, and monitor all actions arising.

Typically, in terms of environmental management, it's the operations and

maintenance contractor that holds the permit for the installation. But we make ourselves available to talk to the Environmental Agency Inspector. We tend to have quite a collaborative involvement, but that doesn't prevent us from taking some quite tricky decisions id necessary. Over a period of time, we've had to terminate legacy fuel agreements, legacy management services agreements, and legacy operations and maintenance agreements to drive cost down and value up, for example.

Over the last couple of years, we've seen savings in terms of management services of around 50% year-on-year from 2021. And we've reduced operations and maintenance costs by circa 21%.

What other collaborations do you have with the site?

We participate in development initiatives for Tyseley Energy Park and the wider East Birmingham Tyseley area, looking at anything from district heating to opportunities to provide private wire supply to electric vehicle charging.

How does an asset like this benefit the environment while also generating returns for shareholders?

The combustion of wood does produce carbon dioxide, but what you generally do is reference a carbon cycle. So as long as the wood is sourced from sustainable forestry, the CO_2 you produce is absorbed by new saplings that have been planted and grown in its place.

With waste wood, that still applies, but obviously the period between growing the wood and burning it is greatly enhanced. But the alternative is worse. The UK produces circa four and a half million in tons a year and it's got to go somewhere — typically landfill. If it goes to landfill, then it decomposes and



produces methane which is a greenhouse gas. If you look at the 20-year life cycle of methane in the atmosphere, then it's up to 80 times the potency of CO_2 in terms of its greenhouse gas effect.

Birmingham Bio Power Limited is just one example of the UK's infrastructure needs over the next few years and beyond. Billions of pounds will be needed to help fund this buildout, but this provides opportunities for investors to not only help fund the UK's renewable energy future, but also generate attractive returns while doing so.

These projects are often backed by the government and have inflation linkage. Furthermore, the sector is largely uncorrelated to the economic environment, which may offer diversification for an investor's portfolio.

Watch the interview and see the asset in action <u>here</u>.





Important information

This article is issued by Gravis Capital Management Limited ("GCM"), which is authorised and regulated by the Financial Conduct Authority under Firm Reference Number 770680. GCM's registered office address is 24 Savile Row, London, United Kingdom, W1S 2ES.

GCP Infrastructure Investments Ltd ("GCP Infra") is a Jersey-incorporated, closed-end investment company. Its shares are traded on the main market of the London Stock Exchange. It is regulated as a certified fund in Jersey, pursuant to the Collective Investment Funds (Jersey) Law 1988. GCM is the Fund's Alternative Investment Fund Manager.

Any decision to invest in GCP Infra must be based solely on the information contained in the Prospectus, the latest Key Investor Information Document and the latest annual or interim report and financial statements.

GCM does not offer investment advice and this article should not be considered a recommendation, invitation or inducement to invest in GCP Infra. Prospective investors are recommended to seek professional advice before making a decision to invest. The merits and suitability of any investment action in relation to securities should be considered carefully and involve, among other things, an assessment of the legal, tax, accounting, regulatory, financial, credit and other related aspects of such securities.

Your capital is at risk and you may not get back the full amount invested. Past performance is not a reliable indicator of future results. Prospective investors should consider the risks connected to an investment in GCP Infra, which include (but are not limited to), hedging risk, concentration risk, counterparty risk, inflation and interest rate risks and risks relating to property development and social infrastructure assets. Please see the detailed Risk Factors section in the Prospectus for further information.

This article has been prepared by GCM using all reasonable skill, care and diligence. It contains information and analysis that is believed to be accurate at the time of publication but is subject to change without notice. It is not intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation. Any recipients outside the UK should inform themselves of and observe any applicable legal or regulatory requirements in their jurisdiction.

