RATING REPORT

Biotech Energy (Private) Limited

REPORT DATE:
September 21, 2023

RATING ANALYST:
Saeb Jafri
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RATING DETAILS				
Rating Category	Current Ratings		Previous Ratings	
	Long-term	Short-term	Long-term	Short-term
Entity	A	A-1	A	A-2
Rating Outlook	Stable		Stable	
Rating Action	Upgrade		Initial	
Rating Date	*September 21, 2023*		*March 29, 2023*	

COMPANY INFORMATION	
Incorporated in 2014	**External auditors:** Zahid Jamil & Co.
Private Limited Company	**Group Chairman:** Mr. Taimur Shaikh
	Chief Executive Officer: Mr. Ali Taimur Shaikh

APPLICABLE METHODOLOGY(IES)
VIS Entity Rating Criteria Methodology – Industrial Corporates (May 2023) **https://docs.vis.com.pk/docs/CorporateMethodology.pdf**

APPLICABLE RATING SCALE(S)
VIS Issue/Issuer Rating Scale: **https://docs.vis.com.pk/docs/VISRatingScales.pdf**

Biotech Energy (Private) Limited

OVERVIEW OF THE INSTITUTION

Biotech Energy (Private) Limited was incorporated in Pakistan in 2014, as a private limited company.

Profile of the Chairman: *The group is chaired by Mr. Taimur Shaikh who is a founder member of Biotech Energy. He holds BS degree from the London School of Economics & Political Science and has over 40 years of experience in industry and trading.*

Profile of the CEO: *Mr. Ali Taimur Shaikh is the CEO at Biotech Energy, is an M.A from University of Oxford with over 10 years of experience. He is a founder member as well and runs the Biodiesel refinery.*

RATING RATIONALE

Corporate Profile

Incorporated in 2014, Biotech is a private limited company involved in the production of Biodiesel with its refinery located in Sheikhupura. The Company is part of the Group Shaikh trust, a holding structure for the Shaikh family. The group is involved in owning and operating Bio Diesel refineries (*in the process of setting up a second-generation Biodiesel refinery in Qatar)*, trading non-ferrous metals and investments in liquid and semi liquid asset classes.

Biotech specializes in advanced biofuel (second-generation) production, which involves utilizing feedstock that cannot be used for human consumption and is mainly composed of organic wastes and residues, used cooking oil, animal fat, and molasses. The biodiesel is a clean-burning diesel replacement that can be used in existing diesel engines without modification; it is comprised of mono-alkyl esters of long-chain fatty acids derived from vegetable oils or animal fats and created from an increasingly diverse mix of resources such as recycled cooking oil, soybean oil and animal fats.

The biofuels are segregated under 3 main categories:

Conventional biofuels (1st generation): Produced from 'food and feed crops' that include starch-rich crops, sugars and oil crops produced on agricultural land.

Advanced Biofuels (2nd generation): These are produced from feedstock that cannot be used for human consumption and are mainly organic wastes and residues, used cooking oil, animal fat and molasses, and palm oil mill effluent.

Advanced Biofuels non-established (3rd generation): It is based on improvements in the production of biomass and mainly includes algae, biomass from households and industrial waste, agriculture and forestry residue, energy crops.

Biodiesel is manufactured following a chemical process called transesterification whereby the glycerin is separated from the fat or vegetable oil; the process results in having two products – methyl esters (the chemical name for biodiesel) and glycerin which is a simple polyol compound that is a colorless, odorless, viscous liquid that is sweet-tasting and non-toxic used in various industries including Food, pharmaceutical, and personal care. Biodiesel has significant environmental benefits in terms of decreased global warming impacts, reduced emissions, greater energy independence and a positive impact on agriculture.

The Company produces 2nd generation EN14214 standard Biodiesel and sells it in European Market. Furthermore, Biotech is the innovator and only producer of 'Poultry Feather Acid Oil Methyl Ester (PFAOME) in the world and is recognized by the UK Road Transport and Fuel Obligations.

The Group also runs the SAAF PUNJAB initiative, under which The Punjab Food Authority (PFA) has granted them license to collect used cooking oil from restaurants in Punjab.

Sector Dynamics & Competitive landscape

The demand for the global biodiesel market is driven by a number of factors, including government policies and incentives to promote the use of renewable energy sources, increasing demand for biofuels in the transportation sector, and growing concerns over climate change and air pollution. Additionally, the biodiesel industry is benefiting from advancements in technology that have improved the efficiency and cost-effectiveness of production.

As per Renewable Energy Directive (RED) II of 2018 (refer to table below), the set new renewable energy targets to be achieved by 2030 for transport sector in EU is 14%. The contribution of advanced biodiesel (2^{nd} generation) (in the overall bio-diesel mix remains small with significant room for growth having no maximum cap compared to biodiesel from conventional feedstock which is capped at 7%. As of today, EU meets 55% of its biodiesel requirements internally while importing the remaining.

The top global players in biodiesel production are REG (USA), ADM (USA), Neste Oil Rotterdam (Netherlands), Louis Dreyfus (The Netherlands), Diester Industries (France),

In terms of value, the biodiesel market is expected to reach $51.47 billion by 2029, at a CAGR of 3.6% during the forecast period 2022-2029.

The biodiesel market is a relatively new industry aging around 10-12 years, the sector in Pakistan is still in its early stages of development, with Biotech Energy is the sole exporter of biofuel from Pakistan. Despite significant livestock and agricultural industry, which are capable of providing abundant raw materials, the growth is slow. The main challenge facing industry is a lack of infrastructure for biodiesel production and distribution. The Asia-Pacific region is expected to be the fastest-growing market for biodiesel due to increasing investments in the sector, favorable government policies, and the availability of raw materials.

Besides high cost of capital, feedstock collection network and stringent quality controls and certifications make it challenging for new entrants to enter the market.

Key Rating Drivers

Export-based business with presence of offtake agreements and strong growth prospects supports business risk profile of the Company.

The Company's risk profile is bolstered by its export-based business, along with the presence of an offtake agreement and promising growth opportunities. Specifically, the Company produces standardized EN14214 standard bio diesel that is completely exported to the EU, with the majority of raw materials sourced locally and only a small portion, 4%, being imported (*namely Methyl*). Given export-based revenues, import restrictions have not affected them adversely. Furthermore, the Company has secured a three-year offtake agreement with a multinational oil company for 48,000 tons of bio diesel, ensuring a stable revenue stream, although capacity utilization remains on the lower side. Client concentration is on the higher side however, there is potential for growth due to strong demand for bio diesel fuel in the EU and Pakistan strategically placed with easy access to raw material on the back of a large edible oil consuming population.

Revenue growth and margin uptick to be supported by ramping up of capacity.

The Company plans to ramp up its production capacity, which is expected to not only boost topline, but at the same time result in margin uptick as fixed cost coverage improves.

Price of biodiesel is set by the international market without any control from the refineries, i.e., all producers are price takers. It mostly trails international us green and waste premiums. Raw material prices also tailgate edible oil prices. Resultantly, margins have remained fairly stable ~20% historically, however, projected to increase sizably (26%) as the Company takes advantage of economies of scale. In addition, the Company also benefits from currency gains.

Operating margins increased sharply by more than 2x in HY23 to 15% (FY22: 6.5%) largely attributable to decrease in freight costs arising from the Company changing its freight mode from Iso containers to full vessel load after making necessary storage arrangements at Kemari port. Similarly, net margins are also expected to get an uplift considering improvement in fixed cost coverage as volumes pick up together with management plans to maintain gearing at reasonable levels.

Sound Capitalization indicators

Total equity base stood at Rs. 3.5b (FY22: Rs. 2.2b) at end HY23. The Company has limited long-term debt in the form of lease liabilities of Rs. 8m. Capitalization profile is reflective of management's conservative approach of keeping gearing low. Consequently, gearing was recorded at 0.19x in HY23 (FY22: 0.30x). While Company intends to take up additional short-term borrowing for working capital support to scale up production, gearing is expected to remain within reasonable levels. the Projected working capital requirement at full capacity is estimated at Rs 2.1b which is planned to be funded through 40:60 debt equity ratio. Projected revenues and margins are expected to result in higher cash generation.

Sound liquidity and cash flow coverage.

Liquidity metrics, including the current ratio and short-term borrowing coverage, have consistently improved over time, with current ratio at 1.6x and short-term borrowing coverage at 1.4x, reflecting a comfortable liquidity position. Cash flow coverage from Funds from Operations (FFO) also remains sound with FFO to LTD at 20% and debt servicing at 4x at end FY22. Working capital cycle has been streamlined from previous years. Collection cycle is relatively short with export proceeds realized in 7-10 days from shipment. Aging profile is considered sound.

Active oversight of sponsors and stringent compliance requirements.

Sponsors are noted to take active part in the business operations, supported by a management team and strong supervisory structure. For effective oversight, 11 committees, including Internal Audit Committee, Engineering Committee & Remuneration Committee are in place. The CEO has actively participated in all committee meetings. Management team expertise bodes well for the Company.

Overall scope and functioning of internal audit, operations and IT function is considered adequate. In addition, Company remains under close surveillance and regular audits by International Sustainability and Carbon Certification (ISCC) and European Union, in order to remain compliant as a Biodiesel supplier. The Company remains exposed to risk of non -compliance with international standards, resulting in revenue loss for the Company.

Sustainability impact of biodiesel business is a rating driver.

Biodiesel being a renewal fuel source has a greater environmental impact through reduced greenhouse gas emissions and improved air quality. As per the European Renewable Energy Directive (RED), only Biofuels that have proof of sustainability can be sourced in Europe.

To comply with that, Biotech has secured International Sustainability and Carbon Certification (ISCC), which entails an assessment of the entire biofuel supply chain and technical plant for calculation of all relevant emissions. As set out by RED, minimum Greenhouse Gas (GHG) emissions savings of at least 80% have to be achieved for all installations starting operations from Jan 2026. Biotech Energy (Pvt) Limited was first ISCC certified in July 2016 and remains certified to date with the latest certification recording GHG savings of 89%.

In addition, the Company has obtained ISO 9001 certification for Quality Management System, ISO 14001 for Environmental Management Systems and ISO 45001 for Occupational Health and Safety Management Systems.

Biotech Energy (Private) Limited Appendix I

Financial Summary

RATIO ANALYSIS	FY19	FY20	FY21	FY22	FY23
Gross Margin (%)	10.0%	22.1%	21.3%	19.4%	30.2%
Net Margin (%)	-10.6%	0.7%	3.0%	3.5%	19.1%
FFO to Long-Term Debt	1.47	8.79	58.92	19.68	21.82
FFO to Total Debt	0.04	0.15	0.16	0.37	1.25
Debt Servicing Coverage Ratio (x)	2.90	3.90	2.34	4.12	20.10
ROAA (%)	-2.3%	0.2%	1.7%	4.9%	17.0%
ROAE (%)	-3.4%	0.3%	2.5%	7.2%	21.3%
Gearing (x)	0.56	0.52	0.46	0.40	0.28
Debt Leverage (x)	0.63	0.59	0.57	0.63	0.35
Current Ratio	1.42	1.58	1.61	1.54	2.13
Inventory + Receivables/Short-term Borrowings	1.35	1.37	1.67	1.32	1.62

REGULATORY DISCLOSURES	Appendix III				
Name of Rated Entity	Biotech Energy (Private) Limited				
Sector	Renewable Energy				
Type of Relationship	Solicited				
Purpose of Rating	Entity Rating				
Rating History	**Rating Date**	**Medium to Long Term**	**Short Term**	**Rating Outlook**	**Rating Action**
	RATING TYPE: Entity				
	21/9/2023	A	A-1	Stable	Upgrade
	29/3/2023	A	A-2	Stable	Initial
Statement by the Rating Team	VIS, the analysts involved in the rating process and members of its rating committee do not have any conflict of interest relating to the credit rating(s) mentioned herein. This rating is an opinion on credit quality only and is not a recommendation to buy or sell any securities.				
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Due Diligence Meeting Conducted

Name	Designation	Date
Mr. Ali Taimur Shaikh	CEO	March 6, 2023
Mr. Adeel Aleem	CFO	
Mr. Umair Amjad	Manager Accounts and Taxation	