CLIMATE

In its alignment with Paris Agreement pathways, India is targeting to achieve its net-zero goal by 2070 and plans to reduce the emissions intensity of its GDP to 45% by 2030 from 2005 level. Key sectors needing attention include energy and transportation, which are major contributors to emissions. It is estimated that India needs around ~USD 20 Bn annually by 2030 to achieve its renewable energy targets¹ and ~USD 266 Bn annually to meet its EV target². While recent investments in clean energy have amounted to ~ USD 20 Bn³ and clean mobility has received ~USD 4.8 Bn4 in government funding, there remains a significant annual gap in climate financing that needs to be addressed.

Debt capital is essential to accelerating the adoption of climate initiatives in India, but private equity and venture capital play a major role in driving climate action by private players in the nation. Debt capital providers like Vivriti have the opportunity to address the market gap by offering long-term capital to companies in the climate sector, enabling their expansion. Mobilisation of debt capital in climate financing from other institutional investors like insurance and pension funds will be key in satiating the large funding need for the sector. Climate financing is an integral part of our sustainable financing avenue, focused on projects/activities oriented towards climate solutions in mitigation & adaptation.

Nishant Kumar

'Source: CEEW Report 2Source: NITI Aayog and RMI 3Source: IEA 4Through GOI's FAME Scheme and PLI Scheme

VIVRITI'S PORTFOLIO

Climate funding currently undertaken by Vivriti:

- **EV Manufacturing & Infrastructure:**
 - CAPEX for setting up EV manufacturing facilities
 - CAPEX for establishing EV battery and charging station infrastructure, including new facilities for battery pack manufacturing, purchasing batteries, integrating with leading OEMs and R&D for improving battery design and performance
 - Support for manufacturers & suppliers of electric vehicles (2, 3 & 4 wheelers) and EV hatteries
 - We support EV financing targeted at end users in urban & rural regions through our on-lending to NBFCs & MFIs that provide loans to clients for purchasing EVs & EV commercial vehicles (2W, 3W, 4W)

- Clean energy projects: Project/mezzanine finance for developers, providers, & suppliers of renewable and clean energy projects, including solar and wind parks. This encompasses financing for the manufacturing of solar panels. CAPEX for setting up biogas plants. CAPEX for installing energy efficiency measures & solutions to conserve energy, hence reducing emissions
- Waste Management: CAPEX for setting up waste management plants

VCL and VAM together have invested in nearly 40 climate sector entities, accounting for 3% of our total portfolio. Of VCL's funding- 49% is allocated to EV infrastructure, 43% to clean energy and 8% to waste management. Additionally, the entirety of VAM's investments is focused exclusively on clean energy.

CONTRIBUTION TOWARDS UN SDGs













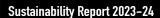


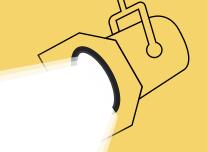














GPS Renewables Pvt. Ltd. (GPSR) was founded in 2012 with a mission to address the pressing issue of organic waste management in India. Recognizing the potential of biogas as a sustainable energy source, the founders aimed to develop innovative solutions for effective waste management and renewable energy generation.

GPSR initially focused on technology, investing heavily in research and development. This investment led to the creation of a versatile technology base that spans bioprocess design, biofuel engineering and byproduct valorization throughout the biofuel lifecycle. Strategic collaborations with global climate leaders and prestigious institutions further fortified its capabilities.

Today, GPSR is renowned for its excellence in end-to-end project execution, offering specialized biofuel products and leading climate-positive infrastructure projects. The company's flagship product, BioUrja, is a state-of-the-art modular biogas plant that processes organic waste, such as food leftovers, into biogas at the source, promoting a circular economy. Additionally, through its subsidiary, GPSR Arya, the company drives large-scale decarbonization initiatives, solidifying its position as a pioneer in the bioenergy sector.

VIVRITI'S ENGAGEMENT WITH GPS RENEWABLES

GPS is a Full Stack Renewable Fuels company providing end-to-end solutions for the development, production and distribution of green fuels with a focus on Compressed Biogas (CBG). They have existing order book from premier clientele including Reliance Industries Limited and Indian Oil Corporation Limited. Neev Fund II, managed by SBICap Ventures is one of the main investors in the company. Vivriti Capital Limited has been associated with GPS Renewable since November 2023, providing debt facilities for working capital for their EPC projects.

ESG SCORE AS PER VIVRITI'S SUSTAINABILITY MODEL



VIVRITI SA4 (73%)

A company that has successfully navigated its sustainability journey and is on an ongoing mission to fortify its practices

IMPACT MEASUREMENT & MANAGEMENT

THEORY OF CHANGE

- India's energy demand is rapidly increasing due to population growth and economic development, with a projected 35% rise by 2030. Currently, ~70% of the energy demand is met by traditional fossil fuels⁵
- Additionally, ~62 Mn tonnes of municipal solid waste are produced each year, with, 50-60% being organic waste. However, only 70-75% of the waste is collected and just 20-25% is processed, highlighting the significant underutilization of organic waste⁶
- For India to achieve its Net Zero, the biofuel share must increase elevenfold compared to the 2022 levels. Although it accounts for ~28% of the energy mix, investment in the sector remains low⁵. By 2030, India aims to expand its renewable energy capacity from the current 195 GW to 450 GW⁷, presenting a substantial opportunity for financing clean energy projects

 Source: IEA **Source: IEA** **Teaching** | 7-Source: Invest India**

Click the links above to explore the Five Dimensions of Impact

Sustainability Report 2023-24

Preamble



CLIENT STORY

Vignan's Foundation for Science, Technology & Research is a Deemed University- "We are using GPS Renewables" biomethanation plant, the BioUrja-1000KPD, for treating food waste generated from hostel kitchens since 19 December 2018. The system can process 1000 kg of food waste per day. GPS Renewables has been handling the O&M of the plant since commissioning. The complete operations and maintenance of the BioUrja-1000KPD are easy and smooth. GPS Renewables' team is highly professional and particular about maintenance of the system and addressing any issues or concerns at the shortest notice. Moreover, their IoT-based remote monitoring and health management system ensure that we do not need to engage skilled labour for the BioUrja operations. Biogas produced from this BioUrja is one of our major fuel sources used in the kitchen apart from commercial LPG. The cooking experience too is more similar to that of LPG which enables the kitchen staff to use the biogas conveniently. The plant is suitable for anyone looking for a wet waste management solution.

TESTIMONIAL FROM THE CEO

As CEO of GPS Renewables, I am proud to highlight our invaluable partnership with Vivriti, which has been instrumental in fueling our growth. Their tailored working capital loans have empowered us to scale our operations efficiently and meet the increasing demand for sustainable energy solutions. Vivriti's commitment to innovation and sustainable finance aligns perfectly with our mission, enabling us to continue pioneering advancements in the renewable energy sector. Together, we are driving meaningful impact and shaping a cleaner, greener future.



Mainak Chakraborty - CEO and co-founder, GPS Renewables Pvt. Ltd.



