DATE OF INVESTMENT MAR 2017

AMOUNT UNDISCLOSED

PARTICIPATION/STAKE MAJORITY

COMPANY NAME
Rio Energy / Serra de Babilônia Wind Project
www.rioenergyllc.com

INDUSTRY / SECTOR Energy

LOCATION(S) Rio de Janeiro, Brazil

DESCRIPTION
Rio Energy is a developer and operator of renewable power generation plants in Brazil. Led by CEO Marcos Meireles, the Rio Energy team has deep knowledge of the Brazilian energy sector, which has given it significant advantages in site selection, understanding the regulatory environment, and pricing of power purchase agreements. Rio Energy's current portfolio consists of 261MW of power generation projects in operations (54 MW Caetité and 207 MW Itarema), a 223MW project currently under construction (Serra da Babilônia), and more than 1,500 MW of expansion and greenfield pipeline projects.

INVESTOR PROFILE
Since 2004, Denham has raised ten institutional funds with approximately US$9.3 billion in committed capital. The fund focuses on the oil and gas, mining and international power generation sectors. In addition to capital, Denham provides its portfolio companies with the managerial support that they need to build energy and resource companies.

FUND NAME
Denham Commodity Partners Fund VI

FUND SIZE US$3 billion

TOTAL AUM US$9.3 billion

OPPORTUNITY

Denham Capital identified Brazil's renewable energy sector as target for investment based on the country's fundamental need for new generation capacity as well as the government's commitment to renewable power. Furthermore, Denham understood that the Brazilian government has been working to diversify away from hydroelectricity, which dominates the country's power generation, because of its vulnerability to drought. Despite Brazil's stable regulatory framework for power generation expansion, Denham also recognized the need to have a local partner with experience in the sector. The fund had been in contact with the founding partners of Rio Energy for several years and had identified them as qualified partners because of their proven track record in selecting locations for their wind farms, their technical expertise in construction management, and their understanding of the investment environment in Brazil. Rio Energy had successfully competed in several government-sponsored power generation auctions, obtaining power purchase agreements at above average prices. As a result, Rio Energy has existing assets which provide long-term, inflation adjusted revenues with limited risk.

EXECUTION

Rio Energy participated in the Brazilian government's 2015 reserve energy auction, successfully signing long-term power purchase agreements for its third wind farm, the 223MW Serra da Babilônia project, located in Bahia state, Brazil's northeast. Rio Energy identified this area for investment because of the highly favorable conditions that offer stronger and more consistent winds than other areas. Because of the company's experience and reputation from past projects, it was able to expedite loan applications for Serra Babilônia through BNDES' (The Brazilian national development bank) fast track process. This significantly reduced financing costs by eliminating the need for a bridge loan and reduced funding delay risks. To match exceptional wind resources at play, Rio Energy selected a top-tier wind turbine supplier, Enercon. Rotor size of this turbine allows it to capture energy most efficiently at the site's average wind speed. The price of electricity awarded to Serra da Babilônia in the long-term power purchase agreement was also the highest among large projects that won contracts in the government's 2015 Reserve Energy Auction. The project accounted for roughly 40% of the capacity sold by wind projects in the auction. Despite the political and economic environment in Brazil, construction of the project began in the first quarter of 2017. The project is expected to enter commercial operation in Q4 2018.

OUTCOME

The Serra da Babilônia wind project is expected to begin operating in Q4 2018. In addition to providing renewable energy to the region once it enters operation, the Serra da Babilônia project is helping to preserve endangered flora species through its Viveiro tree nursery, which also doubles as an education center for sustainable agricultural techniques. Through its youth network program, the project is developing future community leaders while gathering important feedback from residents, and with this feedback, the project is implementing several initiatives to address needs of local residents, such as providing basic sanitation infrastructure, improving roads, and helping to develop local tourism.

ESG IN FOCUS

FUND ESG POLICIES

Denham Capital believes that its role as an investor gives it the opportunity to promote responsible environmental stewardship and socially responsible development. This includes a responsibility to respect human rights and to recognize the importance of climate change and biodiversity. In addition to its financial analysis, Denham considers ESG issues at every stage of the investment process, ranging from thematic selection to deal evaluation and execution. Denham has worked with consulting firms to develop a best-in-class Environmental and Social Monitoring System, allowing active data collection and reporting to its investors.

COMPANY ESG INITIATIVES

In line with both Denham Capital and Rio Energy's policies, the company made voluntary social and environmental investments in the region influenced by the Serra da Babilônia project. The project is located within the Caatinga biome in the semi-arid region of northeastern Brazil. This is one of the more vulnerable biomes in Brazil. To help preserve and restore local plant species, Rio Energy, together with researchers from the Federal University of Rio Grande do Norte, established a tree nursery in São Bento. The nursery is the first environmental management program of its kind in the region. The project registers local plant species, stores seeds, and produces saplings, which will later be used for reforestation. The project currently produces 50,000 saplings per year from 20 species, some of which are endangered. The nursery employs members of the local community, generating income and teaching people about sustainable agriculture. Community members are also trained to manage the nursery as a community cooperative, so that after the company's wind project is completed, the saplings can be sold to businesses that have environmental obligations related to reforestation. The nursery runs on solar energy and uses collected rainwater and filtered ground water for irrigation.

In addition to the tree nursery, Rio Energy started a program called Rede de Jovens ("Youth Network"). The program selected nine young people from different communities within the wind farm's sphere of influence and trained and paid them to interview members of their communities about the social and economic needs of the region. One of the interviews highlighted the lack of access to basic sanitation and plumbing. Together with the youth leaders, Rio Energy is developing a program to install ecological toilets in many households. Likewise, in some isolated areas, the company has helped install water storage and distribution systems for homes.

Another concern raised was emission of dust and small particles from the increased traffic on local dirt roads during construction. To mitigate this impact, Rio Energy built 4km of cobblestone roads alongside the Povoado de São Bento community, which can also benefit locals after the project is completed.

Rio Energy is working on an initiative to help promote local ecotourism. The region is known for its extensive underground caverns (Gruta dos Brejões) but the area lacks adequate tourism infrastructure and access is limited. Rio Energy is helping to develop basic infrastructure to promote tourism, which would give residents in the region a long-term, sustainable livelihood.