

CLEAN ENERGY AND SUSTAINABLE FERTILIZERS

LARGE-SCALE CIRCULAR ECONOMY



01 BRIEF DESCRIPTION OF THE PROJECT

The Sustainable Revolution begins in Amazonas! A pioneering opportunity has arrived for who wish to invest their capital in the installation of the first Biogas Mega Complex in the world North of Brazil and the largest circular economy project in the Amazon, generating energy clean, turning waste into profit and creating an environmental legacy for generations to come. The project that will change the market foresees the installation of four 500 m³ biodigesters, with a capacity of 100 tons/day, using organic waste urban waste collected from fairs, markets, industrial kitchens and company areas installed in the Industrial District of the Manaus Free Trade Zone. On the same floor plan as the project, a sustainable fertilizer plant will be attached to produce compost accelerated, with the use of industrial rotary dryers, a granulator and a automatic packaging.

These strategic axes are aligned with SDGs 7 (Clean Energy), 11 (Cities Sustainable) and 12 (Responsible Consumption), in addition to the framework of the Program National Solid Waste Plan and the Amazonas 2030 Plan. The following results are expected cost savings for industries and farmers, with technology validated in projects similar in other Brazilian states; elimination of 15,000 tons of CO₂ equivalent/year, reduction of contamination of soils and streams by organic waste and replacing imported chemical fertilizers.

CONTACTS

More information about
this and other projects:

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02 JUSTIFICATION AND OPPORTUNITY

Amazonas has the most expensive energy in Brazil, with a heavy dependence on fossil fuels. Manaus generates approximately 2,000 tons of waste a day, 60% of which is organic, and currently only 5% is reused, with the rest going to landfills. The project will solve the problem of 100 tons./day of waste (5% of the municipal total).

For a visionary investor, the use of large-scale biodigesters to produce biogas will offer the use of clean and 30% cheaper energy to serve companies in the District.

The other product generated is the production of biofertilizers to be sold to producers, family farmers or agricultural companies. The northern region imports 90% of the fertilizers it uses, so the project would supply 10% of the region's fertilizer needs, generating low purchase costs for producers. The sale of biofertilizers could be boosted by creating a subsidized program for the purchase of this input, where the government would pay part of the purchase price of the biofertilizers and the producer would pay the other part (like the current State Biofertilizer Program)

Acquisition of limestone (where the producer pays only 50% of the purchase price when participating in the program and the government pays the other half).

03 INVESTMENT NEEDED

US\$ 2,590,000

04 EXPECTED RETURN

IRR= 24.7%

Payback: 4.6 years; US\$ 1,665,000/year

05 SOCIAL AND ENVIRONMENTAL IMPACT

The social impacts are aimed at improving sanitary conditions in the city of Manaus, especially in urban areas, and promoting energy autonomy. It is also expected to generate 50 direct jobs and 150 indirect jobs. Access to low-cost fertilizers will benefit approximately 400 family farmers and rural producers, increasing their productivity, promoting greater income and quality of life and reducing the rural exodus.

The environmental impacts involve reducing greenhouse gases, reducing soil and water contamination and promoting nutrient cycling.