## Pitch Deck

**Introduction:** "Sustainable Effluent Management through Biogas Generation and Liquid Organic Fertilizer Production"

✓ Transforming Rubber Processing Waste into Renewable Energy and Nutrient-Rich Fertilizer"

Problem Statement: "Environmental Pollution and Energy Crisis"

- ✓ Water pollution from untreated effluents
- ✓ Energy crisis and reliance on fossil fuels
- ✓ Potential for renewable energy and sustainable agriculture

Solution: "Anaerobic Digestion Technology"

- ✓ Biogas generation for renewable energy
- ✓ Liquid organic fertilizer production for sustainable agriculture
- ✓ Reduction of greenhouse gas emissions and environmental pollution

Market Potential: "Growing Demand for Sustainable Solutions"

- ✓ Increasing pressure on industries to adopt sustainable practices
- ✓ Growing demand for renewable energy and organic fertilizers
- ✓ Potential for commercialization and partnerships

Technology and Methodology: "Fixed Dome Anaerobic Digester"

- ✓ Constructed using local materials
- ✓ Optimized for biogas production and liquid organic fertilizer generation
- ✓ Community engagement and job creation

Benefits: "Environmental and Economic Benefits"

- ✓ Reduction of environmental pollution
- ✓ Generation of renewable energy
- ✓ Production of nutrient-rich liquid organic fertilizer
- ✓ Job creation and community development

Business Model: "Revenue Streams"

- ✓ Biogas utilization to generate heat
- ✓ Liquid organic fertilizer sales
- ✓ Carbon credits and environmental benefits

Team: "Experienced Team"

Fagbemi Emmanuel Adeleke is a product of the Federal University of Technology Akure and The University of Ibadan where he studied Mechanical Engineering (Thermo-fluid). He joined the service of the Rubber Research Institute of Nigeria Ivanomo in 2011, he has expertise in the development, design, and fabrication of natural rubber processing equipment, rubber seed processing, and renewable energy generation (effluent management). He is a trainee of 2019 training fellowship award in Thailand and Myanmar by International Rubber Research and Development Board (IRRDB) on Good Agricultural Practice (GAP), Extension of Transfer of Technology (TOT), Processing and Research & Project Management with Rubber Authority of Thailand (RAOT) and Myanmar Rubber Planters and Producer Association (MRPPA), 2015 trainee on Construction of Fixed Dome Biogas Digester for Production of Biogas from Cow Dung and other Agricultural Wastes under West Africa Agricultural Programme in Collaboration with Rubber Research Institute of Nigeria and GAWAL limited, Sponsored by World Bank. He has served in various capacities in the development of natural rubber such as; the Committee on Rubber Processing and Effluent Management (2014 – 2020) and the technical Team on the Construction of a Fixed Dome Biogas Digester for the Generation of Biogas from Biomass (Cow Dung). Igueviobo Village, Benin City (2015), Committee on Repair and Maintenance of RRIN New Staff Quarter Boreholes (2016 - 2017), Committee on Evaluation of Bids for Construction of RRIN Access Road (2016 - 2017), RRIN Housing Allocation Committee (2017 -2022) and many more. He was awarded the 2018 Departmental Most Hardworking Staff (Research), Research Operation Department, Rubber Research Institute of Nigeria, Benin City, Edo State, Nigeria. He has over 20 peer-reviewed journals in his area of research. He is happily married to Eunice Oluwaseun Fagbemi (Nee Ojuope) and has three children.

Dr. Faithfulness Oseiwe Oseghale-Osazee is a Principal research officer of the Rubber Research Institute of Nigeria. Her academic research activities have been centered on antimicrobials and effluent management utilization. Faithfulness holds a Bachelor's Degree in Microbiology, a Master's Degree in Food and industrial Microbiology and a Post Graduate Diploma in Education. Most recently in November 2024, she was inducted as a research fellow of the international Rubber Research and Development Board (IRRDB). Faithfulness has over 20 published articles and conference papers. In addition to research, Faithfulness is passionate about God and believes that music is a valuable tool to human development.