RFACTD LIMITED

Advanced Glass Processing & Materials Innovation Hub

Founder/CEO: O. T. Bozimor **Location:** Bayelsa State, Nigeria **Classification:** Strictly Confidential

1. EXECUTIVE SUMMARY & THESIS

Nigeria currently faces an unsustainable annual glass import bill estimated between **₦800B and ₦1.2T**, spanning tempered architectural systems, security glazing, automotive frameworks, and technical labware. RFACTD Limited disrupts this dependency by establishing West Africa's first vertically integrated specialty glass processing and materials innovation hub.

The De-Risked Approach: Unlike high-failure commodity operations requiring upwards of ₦120B for immediate float melting, RFACTD utilizes a phased **Dual-Engine Architecture**. We commence immediately with downstream specialty fabrication to capture cash flows before progressively back-integrating into regional sand melting.

2. THE STRUCTURAL MOAT: INFRASTRUCTURE + ESG

Our raw material sourcing solves an explicit regional crisis. By executing a controlled dredging model in the U-shaped river basins of Bayelsa State, we expand water channel depth to provide continuous regional flood mitigation.

The ESG Masterstroke: The high-grade silica sand extracted from our flood-prevention operations forms the primary batch raw material for glass lines. This dual posture directly unlocks concessional multilateral climate finance, green bonds, and localized tax holiday (Pioneer Status) benefits.

3. THROUGHPUT & PRODUCTION ARCHITECTURE

Phase 1 targets an ecosystem capacity of 150 Tons Per Day (TPD) combining imported float sheet processing, container glass systems, and localized modular trial furnace melts.

Ecosystem Throughput Function	Year1 (TPD)	Year3 (TPD)	Year5 (TPD)
Imported Float Sheet Processing	25-35	60-75	70-90
Bottle/Container Packaging Systems	8-12	18-26	20-30
Laminated Security & Custom Blown Glass	8-13	21-30	25-35
Small Furnace Local Sand Melting	3-5	8-15	10-20
Total Installed Throughput Base	**44-65**	**107-146**	**125-175**

4. HIGH-MARGIN PHASE 1 PRODUCT MATRIX

Tempered Architectural Glass (35% Share): Core construction, high-rise structural facades, real estate extensions. Gross Margins: 32–40%.

- **Laminated Security Systems (20% Share):** Defense glass, tactical installations, institutional banking layouts. Gross Margins: 35–45%.
- **Insulated Glazing Units (15% Share):** Double/triple glazing for medical labs, hospitals, high-efficiency developments. Gross Margins: 30–38%.
- **Premium Consumer / Specialty (30% Share):** Retail LED mirror lines, marine glass, customizable returnable container systems. Gross Margins: 40–60%.

5. FINANCIAL TRAJECTORY

Conservative forecasting mapping industrial ramp-ups post commissioning.

Year	Rev (₦B)	EBITDA (₦B)	NP (₦B)
Year 1	3.8	0.62	0.31
Year 2	5.4	1.10	0.64
Year 3	7.8	1.90	1.10
Year 5	13.5	3.78	2.20
Year 10	40.0	12.00	7.20

* Blended Target Equity IRR: **18–26%**
* Projected Payback Horizon: **5–7 Years**

6. MASTER CAPEX PHASING

Phased equity and debt execution limits early investor exposure.

- **Phase 1 (₦19.5B – ₦35B):** Downstream processing line procurement, initial 5–8MW solar PV microgrid, local dredging setup.
- **Phase 2 (₦19.5B – ₦39B):** 5 - 15MW flare-gas captive grid integration, mid-scale container melting.
- **Phase 3-5 (₦150B+ Expansion):** Magnetron vacuum coating lines, advanced transparent electronics, long-term multi-line continuous float plant.

7. ENERGY SOVEREIGTY STRATEGY

Grid unreliability is an existential risk to furnaces. RFACTD deploys an isolated industrial microgrid. Phase 1 scales hybrid Solar + Lithium battery banks + diesel baseloads, transferring in phase 2 directly to discounted captive flare gas extraction in correlation with local IOC operators.

8. CRITICAL RISK REGISTER

- **FX & Input Volatility: Mitigated via raw sand extraction and structured export invoicing across ECOWAS network.**
- **Furnace Energy Halts: Isolated backup automation loops with captive microgrid architecture.**
- **Talent Engineering Gap: Retaining immediate operating lines from Turkey, China, and India.**