



A CASE STUDY

AT DANGOTE REFINERY
IN LAGOS, NIGERIA
COMPARING BASELINE TO



CASE STUDY

DEMONSTRATING

- **1. Savings on Fuel Consumption**
- 2. Savings in Greenhouse Emissions
- **3. Improvements to Engine Care**



ABOUT THE PRODUCT:



- > AMERICAN PRODUCT
- > WIDELY USED WORLDWIDE
- > FAVORITE OF THE US ARMY
- > SIMPLE, INLINE FUEL CATALYST
- > MAINTAINS GENERATOR WARRANTY
- > \$2 MILLION PRODUCT INDEMNITY
- > 10-YEAR WARRANTY ON CATALYST











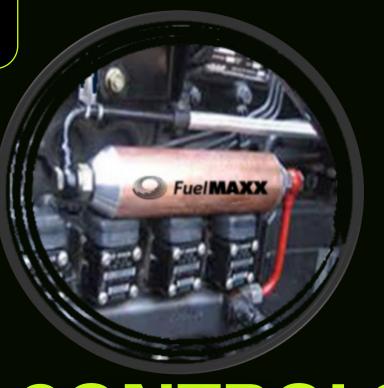
Differential Flow Meter Fitted to 1000 kva Generator Chosen By Dangote, Run 100+ Hrs to Establish **BASELINE.**



FuelMAXX Catalyst Filled in the Fuel Line and Generator was run for additional 250 Hrs as the **Cleanout Period.** (Readings now not in analysis.)



POST CLEANOUT: Generator was run for additional 100+ Hrs. The readings then compared to the **BASELINE**.



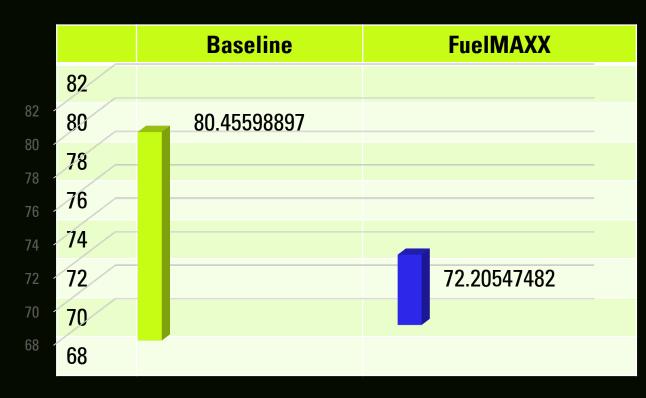


OVERALL ANALYSIS

- 10.25% Fuel Savings
- Consumption rate shows a steady decline expected to level off at approximately 13 15%

L/Hr

FUEL CONSUMPTION COMPARISON



Baseline FuelMAXX

FuelMAXX Fuel Catalyst Return on Investment					
Manufacturer	Model	Engine Size	Solution Cost - Ex Works	Fuel	Gross Engine
		L	Naira	Liter/Hr	Power Output
CAT	1000kva		7,437,500	72	1000
CAT 1000KVA			Carbon Foot Print Impact		
Daily Operating Hours	23	From data collected			
Hourly Diesel Consumption (L)	72.2	From data collected	Current Yearly tCO ₂ e	1588.05	SCP"RON
Avg Per Liter Diesel price - Naira	150	Average	Offset tCO₂e with Pine Trees Hectare	159	
Efficiency (10.25%) with FuelMAXX			Projected Yearly tCO2e @10% Savings	15	1350
Daily Diesel Consumption	Liter	1,660.60	Offset tCO₂e with Pine Trees Hectare		135
	Naira	315,514.00	Projected Yearly tCO2e @15% Savings	20	1270
Monthly Diesel Consumption	Liter	49,818.00	Offset tCO₂e with Pine Trees Hectare		127
	Naira	9,465,420.00	Projected Yearly tCO ₂ e @20% Savings	30	1112
Yearly Diesel Consumption	Liter	557,961.60	Offset tCO₂e with Pine Trees Hectare		111
(336 Days per year)	Naira	106,012,704.00	Note:		
Yearly Efficiency Savings	Naira	10,866,302.16	Currency Fluctuation: This Price Is Based on Naira to USD rate of 475.		
Cost of Equipment	Naira	7,437,500.00	Invoice Will Be at the Current Parralel Ra	ite on the Date of I	ssue.
Payback (Years) Approx		0.68			
Payback (Hours) Approx		5,662.57			New Section 1
Efficiency (15%) with FuelMAXX			FuelMAXOX		
Yearly Efficiency Savings	Naira	15,901,905.60	Fuelmon	FuelALA	RX/
Cost of Equipment	Naira	7,437,500.00	O FUEIMARX	0.	1-1-
Payback (Years) Approx		0.47	C Plan	FOOTBALLY	
Payback (Hours) Approx		3,869.42	G FuelM	AXX	
Efficiency (20%) with FuelMAXX			O Fuerma	ar an	
Yearly Efficiency Savings	Naira	21,202,540.80	£	-	
Cost of Equipment	Naira	7,437,500.00			
Payback (Years) Approx		0.35			
Payback (Hours) Approx		2,902.07			

- Fuel Savings in Excess of 10.25%
- Resulting Savings in Greenhouse Emissions
- Resulting Extension of Engine Servicing and Rebuilds
- Return on Investment in 8.16 Months
- 10-Yr Warranty of FuelMAXX Results in More Than 9 Years Warranted Savings Following Return on Investment

CONCLUSIONS

