

Fuel Economy Savings Study

Transmilenia Bus SI



Data Accumulated By
Transmilenia Bus Company
At their Bus facilities in Bogota, Colombia

Purpose of The Testing
To Track Fuel Economy with And Without
The Rentar Fuel Catalyst

Type of Testing
Comparison Study
Sixteen Mercedes Benz Buses
Baseline vs. Buses with the Rentar Fuel Catalyst Installed

Date of Testing
March 2006 - March 2007

Summary of Findings

Transmilenia independently conducted fuel economy studies on sixteen buses with Mercedes Benz engines at their Bogotá Columbia bus facility. The testing was in conjunction with Arbel Trading. The results are reported below.

The results documented in the attached report demonstrated that Rentar Fuel Catalyst improved fuel consumption by an average of 3.59% on the sixteen buses.

Effect on the Transmilenia fleet of 450 Buses.

The average bus in the Transmilenia fleet travels 120,000 miles per year purchasing fuel at \$2.25 per gallon. This computes to an average cost reduction of \$1,378 per bus, \$620,000 for 450 buses or \$6,201,000 on 4500 buses.

Return On Investment

The return on investment (ROI) or repayment of cost is 11 months.

Greenhouse Gas CO2 Emissions

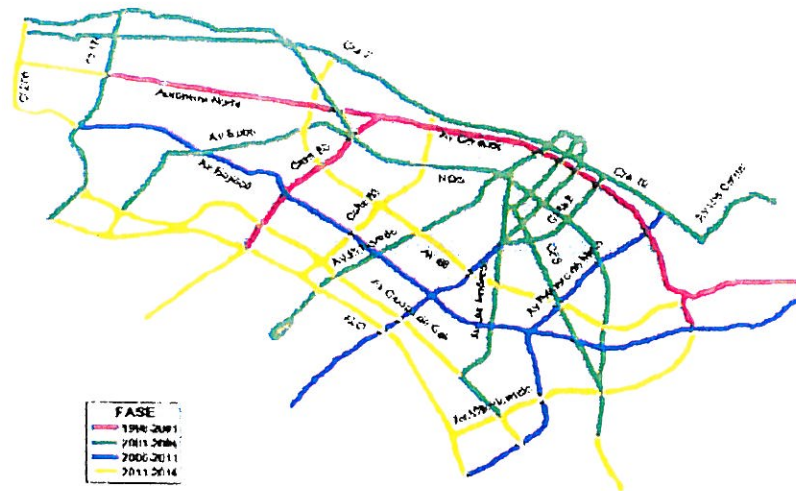
CO2 greenhouse gas emissions will be reduced by 27,600 metric tons based on 4500 buses. 2,600 metric tons of CO2 emissions reduced on 450 buses. This computation is based on that for every 100 gallons of diesel fuel not burned; 1 metric ton of CO2 is not released into the atmosphere.

Monetary Value Of Reducing CO2 Greenhouse Gases

27,600 metric tons of CO2 not being emitted has a monetary value under the Kyoto protocol "cap and trade" program can create additional revenues for Transmilenia. At \$8 per ton, 27,600 metric tons would be worth \$220,800 annually for 4500 buses or \$22,080 for 450 buses.

Being A Green Company

Being a "green company" has its own inherent value. Protecting the environment and the health of Transmilenia employees and clients creates a positive public image.



Bogota's TransMilenio system projected to 2016 (Source: www.transmilenio.gov.co)

Test Protocol

Bogota Colombia - Controlled Comparison Testing

Transmilenia selected 16 buses with Mercedes Benz engines.

1. Beginning and ending odometer readings were taken by Transmilenia. They converted those readings into daily MPG readings.
2. Fuel usage was acquired from Transmilenia's official fuel billing records.
3. The testing was conducted at the Transmilenia Bus facility in Bogota, Colombia.
4. The 16 buses were driven over similar routes and in similar weather conditions throughout the duration of the fuel economy study.
5. At the conclusion of the Comparison Study the fleet mileage per gallon was compared to:
 - a. Average miles per gallon computed prior to the installation of the catalyst
 - b. To the miles per gallon computed after the installation of the Rentar Fuel Catalyst.

Testing Timeline

Phase 1 - Three month baseline study

Phase 2 - 12 days - Break-in Period

Phase 3 - Four to nine months - After installation data collected over a accumulated total of 1,920,000 miles.

The fuel consumption improvement was 3.59%

**Current Transmilenia Cost of Fuel and Estimated Savings
Through the Use of the Rentar Fuel Catalyst On 450 Buses**

Basis of Data:

- | | |
|--|---------|
| 1) How many miles per truck per year ? | 120,000 |
| 2) What is the Mpg? | 7.03 |
| 3) What is the percentage of savings? | 3.6% |
| 4) What price per gallon? | \$2.25 |
| 5) What average % fuel price increase? | 5% |
| 6) How many trucks? | 450 |

	Gross Annual Fuel Cost	Gross Fuel Savings	Accumulated Fuel Savings	Avg. Monthly Savings
Year 1	\$17,283,000	\$622,000	\$622,000	\$51,800
Year 2	\$18,147,000	\$653,000	\$1,275,000	\$54,400
Year 3	\$19,054,000	\$686,000	\$1,961,000	\$57,100
Year 4	\$20,007,000	\$720,000	\$2,681,000	\$60,000
Year 5	\$21,007,000	\$757,000	\$3,438,000	\$63,000

Note: The results provided in this worksheet are estimates only, actual results may vary.

**Current Transmilenia Cost of Fuel and Estimated Savings through
use of the Rentar Fuel Catalyst 4500 Buses**

Basis of Data:

- | | |
|--|---------|
| 1) How many miles per truck per year ? | 120,000 |
| 2) What is the Mpg? | 7.03 |
| 3) What is the percentage of savings? | 3.6% |
| 4) What price per gallon? | \$2.25 |
| 5) What average % fuel price increase? | 5% |
| 6) How many trucks? | 4500 |

	Gross Annual Fuel Cost	Gross Fuel Savings	Accumulated Fuel Savings	Avg. Monthly Savings
Year 1	\$172,830,000	\$6,220,000	\$6,220,000	\$518,000
Year 2	\$181,470,000	\$6,530,000	\$12,750,000	\$544,000
Year 3	\$190,540,000	\$6,860,000	\$19,610,000	\$571,000
Year 4	\$200,070,000	\$7,200,000	\$26,810,000	\$600,000
Year 5	\$210,070,000	\$7,570,000	\$34,380,000	\$630,000

Note: The results provided in this worksheet are estimates only, actual results may vary.

