

# FLEET EFFICIENCY MANAGEMENT

VEHICLES | PROCESS | ALTERNATIVE FUELS

## Build Fleet Intelligence to Unlock Efficiency and OpEx Opportunities

### Background

Vehicle fleets represent an essential operational component of a Cable MSO's ability to deliver high quality products and services. For a tier 1 MSO, a typical fleet is composed of thousands of vehicles representing a great deal of capital and operational expense. Unsurprisingly, an inefficient fleet generates unnecessary energy, financial and carbon emission waste.

### Problem

Given the essential nature of fleet operations for an MSO, fuel expenses are considered a necessary cost of business. However, volatility and real increases have defined fuel prices since the 1970's, and that trend is forecast to continue. Given the amount of fuel MSO fleets consume, even small changes in fuel prices can create a noticeable, bottom-line impact.

Additionally, most MSOs spend a disproportionate amount of time and money to ensure network functionality, reliability and coverage, all in good reason. However, this focus tends to isolate often overlooked components of MSO operations - vehicle fuel and process efficiency of the fleet. The common result is an under-developed fleet management system that is both unequipped to absorb the financial risk from volatile fuel prices and unprepared to adjust to the changing demands of a growing business.

### Solution

Coppervale consultants, employing a unique set of methods and data analytics, work with cable operators to build fleet intelligence to unlock efficiency and OpEx opportunities. We work with you to identify and eliminate symptoms of inefficiency to reduce fuel consumption, enhance truck roll productivity and reduce your fleets' costs and carbon footprint.



Coppervale Enterprises Inc. is the leading energy management and sustainability consultancy to the broadband industry. Our team consists of energy and carbon management specialists, environmental experts, and sustainability professionals who provide:

- **Business Intelligence** – financial, energy and environmental auditing and analytics to optimize energy purchasing, consumption and planning
- **Turnkey Integration** – sustainable strategies and solutions to create cost savings, improve energy efficiency and reduce carbon emissions

Coppervale can also show you how to take full advantage of the public relations value associated with reducing your environmental impact. Visit us at [www.coppervale.org](http://www.coppervale.org)

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## Coppervale's Strategic Approach to Optimizing Fleet Energy Consumption and Reducing Emissions

### Moving Beyond Anti-Idling

Many fleets are using Telematic or GPS systems to improve routing and address vehicle idling. While these are important areas of focus, there is additional opportunity for significant savings “beyond anti-idling” that come from more granular and creative work. Coppervale, using a proven set of methods and data analytics, can unlock the full potential of your fleet. Final recommendations often include simple, capital free changes to management policies or driver behavior modifications but can also focus on fuel conversion or recapitalizing underperforming fleet assets.

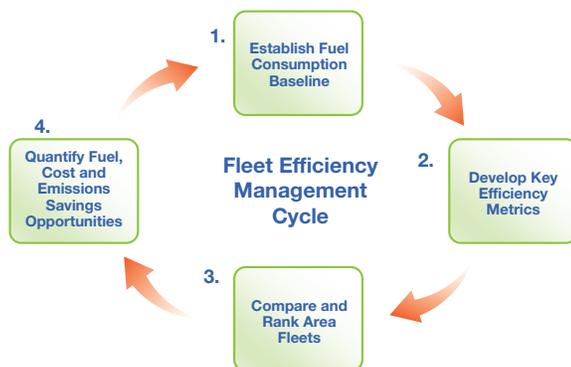
### Fleet Efficiency Management Methodology

Our *Fleet Efficiency Management Methodology*, like our *Carbon Abatement Plan*, is designed to generate a roadmap for determining “where to go” and “what to do”. First, we conduct a Baseline Audit to assess fuel consumption, costs incurred and carbon emissions generated by the fleet. This audit is essential to establish a baseline for comparison. Next, we develop standardized key efficiency performance metrics tailored specifically to an MSO's fleet operations. Comparing different fleet performance metrics allows for us to target regional fleets or specific vehicles that would be optimal candidates for efficiency projects. Our Efficiency Metric Analysis quantifies the total potential fuel, cost and emissions savings opportunities associated with the target fleets or vehicles.

Understanding the “why” behind a particular fleet's performance is critical to implementing the right solutions. One solution doesn't fit all MSO fleets, so we conduct qualitative research via a *Best Practice Analysis* to develop smarter solutions tailored to your unique fleet. After facilitating interviews across fleet, tech ops, customer care and engineering, we document the best practices contributing to vehicle fuel and process efficiency. Using this information, we can target specific efficiency projects for implementation and then socialize the best practices across the company.

### Integrating Alternative Fuels

Alternative Fuel Vehicles (AFVs) are now sold on the market for commercial applications. Access to adequate fuel sources for AFV vary by region but may represent a beneficial alternative to a traditional fossil fuel vehicle given its lower cost per gallon equivalent and reduced carbon footprint. Taking into account more than just the initial cost of the vehicle, fleet managers working to recapitalize today face a much more complicated decision than ever before. Fleet financial calculator results are combined with our knowledge of the alternative fuel landscape to provide cable operators guidance on “what to do” when considering capital purchases.



#### Baseline Audit

Establish a fleet fuel, cost and emissions baseline.



#### Efficiency Metric Analysis

Generate KPI metrics to assess relative efficiency of the fleet; create a target list of opportunities savings.



#### Best Practice Analysis

Document and codify existing best practices.



#### Business Case Assessment

Financial analyses on select efficiency projects for implementation.

