



Coppervale helps create an actionable carbon abatement roadmap and identifies \$16M in energy cost savings

Customer

U.S.-based MSO with a footprint in 29 states, offering TV, phone and internet services, as well as home security. This customer operates a fleet of over 20,000 service trucks and vehicles to maintain its network and service customers.

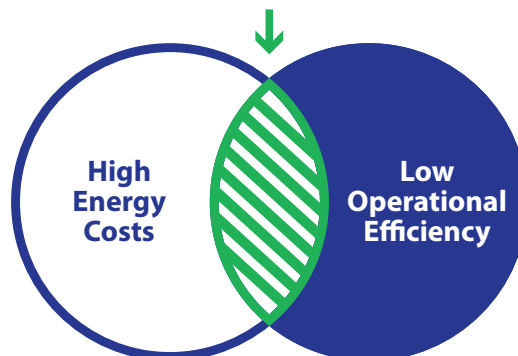
Challenge

Stakeholder pressure spurred the client's C-suite to adopt a carbon emissions reduction goal – despite a lack of centralized energy data, knowledge about the total energy or emissions footprint of the company, and a limited budget for efficiency projects. As such, the client needed to ensure its emissions reduction actions were cost-effective and reasonable to achieve in a 3-year period.

Additionally, the initiative originated at the client's headquarters, but its areas of highest energy consumption (truck fleet, outside plant network and facilities) were managed regionally or facility-by-facility. Thus the client needed insight into the feasibility of on-the-ground efficiency actions, that could be easily adopted and fit into the enterprise-level abatement plan.

Industry: Broadband and Telecommunications
Employees: 51,600
Subscribers: 11 million

Abatement "Sweet Spot"



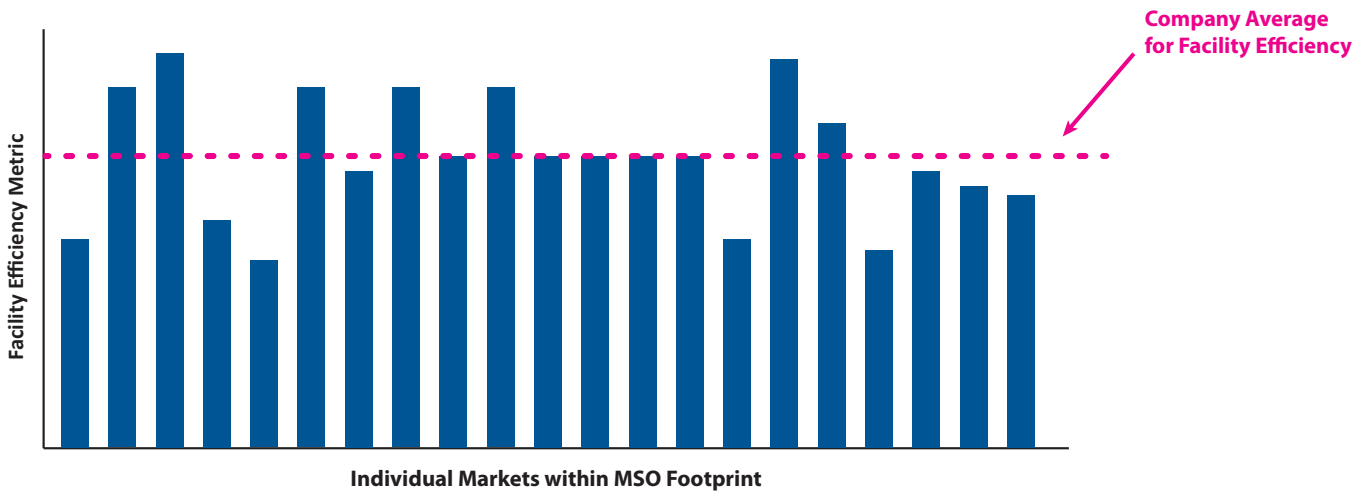
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Solution

The client had already worked with Coppervale to establish baseline data on its enterprise energy usage and associated emissions. Coppervale leveraged that data to generate a long-term emissions reduction target, and customized KPIs to track progress on that target. These KPIs were tailored to the intricacies of the clients operations and used to uncover “abatement sweet spots”: opportunities where high energy costs and low operational efficiency intersected. Our analysts, with backgrounds in outside plant infrastructure and critical facilities engineering, supplemented our sustainability experts to inform actionable steps to achieve reduce emissions—not only uncover, but quantify energy OpEx savings potential.

Total Facility Electricity Consumed Per Subscriber — Market by Market Comparison



Results

After Coppervale used bespoke metrics to identify low-hanging fruit for efficiency projects, Coppervale was further engaged to advise the client on steps to take to achieve those abatement goals. Coppervale responded by crafting a rank-ordered list of steps the client could take to achieve emissions abatement and save on energy costs – and suggested a series of various efficiency solutions based on the best business cases for each – spanning the client’s fleet, outside power plant network and critical facility infrastructure. These discrete actions were carefully selected to provide the highest energy and emissions-reduction ROI to achieve the reduction goal. Coppervale also revealed significant opportunity for cost savings in its efficiency recommendations. Coppervale was able to clearly show the timeframe, cost savings and energy reduction potential for each abatement suggestion, totaling \$16m in potential savings.

2013 Regional Rankings

| | Potential OSP Savings | Potential Facilities Savings | Potential Fleet Savings | Potential Business Travel Savings | Total Overall Potential Savings |
|--|-----------------------------|------------------------------------|-------------------------------|--|---------------------------------------|
| Region 1 | \$251,916 | \$400,787 | \$2,755,376 | N/A | \$3,408,079 |
| Region 2 | \$1,358,229 | \$1,333,625 | \$458,580 | N/A | \$3,150,434 |
| Region 3 | N/A | \$1,596,178 | \$1,474,976 | N/A | \$3,071,154 |
| Region 4 | \$147,713 | N/A | \$2,392,432 | N/A | 2,540,145 |
| Corporate | N/A | N/A | N/A | \$2,366,033 | \$2,366,033 |
| Region 6 | \$235,408 | \$12,463 | \$775,363 | N/A | \$1,023,233 |
| Region 7 | N/A | N/A | N/A | N/A | N/A |
| Total Estimated Potential Savings | \$1,993,266 | \$3,343,053 | \$7,856,726 | \$2,366,033 | \$15,559,078 |

Summary of Coppervale Actions

- Crafted a strategic plan for reducing its carbon emissions throughout the enterprise, targeting operations of lowest energy efficiency in the company.
- Developed bespoke KPIs to identify lowest-performing sites and operations, market-by-market
- These KPIs were tailored to the intricacies of the clients operations and used to uncover “abatement sweet spots”
- Leveraging knowledge of the industry’s best-practices, as well as carbon audit data, Coppervale crafted a reasonable reduction target for the client’s emissions
- Created a rank-ordered list of feasible abatement actions for OSP, Critical Facilities and Fleet
- Quantified ROI: business case opportunity, cost savings and emissions reductions for each action, totaling \$16m in savings

About Coppervale

Coppervale Enterprises Inc. is a leading energy management, engineering and sustainability consultancy to the broadband industry. Our team consists of energy and carbon management specialists, environmental and sustainability professionals, and veteran cable engineers. Let Coppervale show you how you to improve operational efficiency, reduce your energy costs, and minimize your carbon impact. To find out more, visit us at www.coppervale.org.

Coppervale's energy analysts are experts in reducing energy consumption and carbon emissions, and generating cost savings for our clients.

Start reducing your environmental impact while you save money today.



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