



Minimizing CO₂ Emissions

Carbon-Conscious Decisions Reduce Fleet Cost and Air Pollution

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As the automotive industry faces more regulations on CO2 emissions – and as fleet decision makers and consumers increase their awareness of the effects of carbon pollution on the environment – an assessment tool to compare vehicle choices is essential. Beyond that, the financial picture deserves thorough analysis as well.

Coca-Cola Bottling Company Consolidated Operations, LLC (CCBCC), based in Charlotte, North Carolina, secured a comprehensive system created by its innovative fleet management provider. Now, with a complete analysis of both the environmental and financial ramifications of various fleet vehicles, Coca-Cola has decreased its carbon output and associated costs significantly and is considering additional “green” fleet vehicles to take the benefits even further.

The Challenge:

Minimize carbon output with cost effectiveness

The Solution:

Analyze carbon's environmental and economic impact

The Results:

Reach carbon-conscious decisions based on environmental and economic criteria



The Challenge:

Minimize carbon output with cost effectiveness



Today's fleet decision makers are in a critical position to reduce the amount of carbon emissions that enter the environment, and with the need to make effective decisions on carbon reduction methods, an accurate assessment of more than just carbon data is necessary. Looking at isolated data in a vacuum was pointless, so Coca-Cola Bottling Company Consolidated Operations turned to Donlen Corporation, based in Northbrook, Illinois, for the solution.



The Solution:

Analyze carbon's environmental and economic impact with Donlen's tool and consulting



From the beginning, CCBCC recognized it needed analytical consultation to help the company navigate its way through the data – and emissions regulations – for answers.

Collaborating with CCBCC's decision makers, Donlen's experts applied their proprietary carbon calculator tool to give CCBCC the facts. With the authoritative data for considering the fiscal elements of incorporating hybrids and other fuel-efficient vehicles into their fleets, the company compared vehicles and saw how they measured up with carbon output.

Donlen created the carbon conversion and calculation tool and incorporated data and formulas from the U.S. Environmental Protection Agency and the Department of Energy's Argonne National Laboratory Transportation Technology R & D Center. The innovation provides analyses of fuel and maintenance for more than 200 vehicle selections, giving users a visual comparison of the complete picture of vehicle emissions output and cost.

In one calculation, for example, the tool reveals that a hybrid vehicle can cost up to 50% less in fuel spend, and emits 47% less global warming pollution, over a three-year period, than the average mid-size sedan. The tool analyzes these factors:

1. Fuel cost per gallon for the driver's operating area
2. Vehicle model year, make and model
3. Air pollutant and greenhouse gas emissions output
4. Combined EPA fuel economy rating

An additional benefit of the Donlen calculator is that clients have instantaneous access to the results. Donlen's innovation allows fleet managers to accurately compare air pollution and greenhouse gas emissions, with the ultimate goal of selecting a vehicle that meets the company's emissions and financial goals.

The Results:

Reach carbon-conscious decisions based on environmental and economic criteria

For CCBCC, the decision was clear. Employing Donlen's consultation and carbon calculator tool, the decision makers opted for a "green" fleet vehicle that improved both their emissions output and their cost.

CCBCC's fleet currently has 361 Toyota Prius, compared with 87 Prius in September 2005. In total, CCBCC has replaced 274 vehicles with Prius since September 2005, and has achieved dramatic carbon reduction results.

Based on the EPA fuel economy ratings, and an estimate of the annual mileage accumulation for CCBCC drivers, the replacement decision achieved an estimated annual Carbon Dioxide output reduction of 3,449,105 lbs (1,725 tons).

Over a two-year period, the reduction will equate to 6,898,209 lbs (3,449 tons); 3 years ~ 10,347,314 lbs (5,174 tons); 4 years ~ 13,796,419 lbs (6,898 tons); 5 years ~ 17,245,524 lbs (8,623 tons).

The corporation not only met its goals but also set new ones that are both environmentally and fiscally promising.

"The carbon emissions reduction tools have been used in the CCBCC light duty fleet to ensure we are more fully informed about the purchase decisions we make", said Rick Clark, VP, fleet and transportation operations, CCBCC. "The availability of this information has expanded our awareness beyond the short-term economic impact of our purchase strategy to the long-term environmental impact of our ongoing fleet operations."

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