Title:

What A Lot Of Waste?

Subtitle:

Construction Waste Management is a mounting problem

Body:

Here we are again. It is the Big 5 time of year and I am sure that we are going to have Leading technical experts speaking on Green Environmental Engineering, Energy Saving Solutions and District Cooling. But Green Environmental Engineering, Energy Saving Solutions and District Cooling are just part of the overall environmental impacts which the construction industry needs to keep a tab on. One of the largest negative contributors to the environment is construction and demolition waste. Often it contains hazardous materials masked in layers of concrete and other building materials.

What a lot of Waste:

Over the period of 2006-2008, the construction and demolition waste grew from 10.5 million tons to 27.7 million tons in 2007 and even with the down turn in construction, the waste numbers are likely to rise above 66 million tons in 2008. We cannot do much about the production of waste, but we can do a lot about the disposal of construction and demolition waste and more importantly about the cost of handling this waste. Over the past couple of years various agencies and private sector establishments have opened construction and demolition waste recycling plants and started to legislate the proper handling of waste.

One of our clients is currently exploring ways to provide a better and more efficient and therefore cheaper service to their customers. As such, they are planning to deploy the Telargo Fleet Management solution for fleet optimization, scheduling, and remote monitoring of portable compactors to avoid unneeded and costly waste pickups. The solution that they are deploying a revolutionary idea for remote monitoring of waste levels within portable compactors and skips. Using the Telargo solution they will be able to reduce the number of trips needed to collect the construction and demolition waste. By reducing the number of trips, they build on the Telargo Go Green initiatives by reducing engine wear, tire wear, fuel usage and labor costs associated with providing the construction and demolition waste collection service to their customers. This result is a huge direct savings to everyone involved.

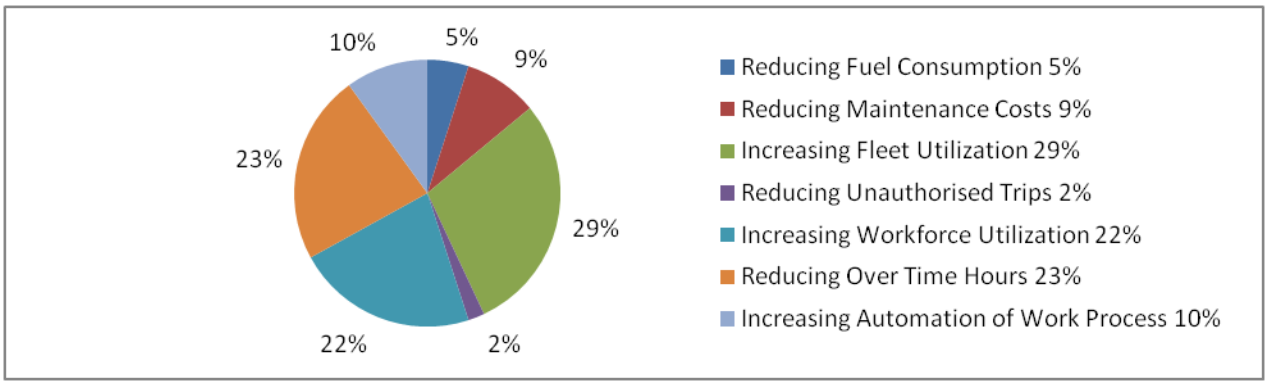
Sometimes Less is More

The solution builds on the scheduling and route management engine which I discussed in the previous article. Our clients' specific interest here was managing to reduce the idling time that vehicles experienced by reducing the unneeded trips to the various customers. Running a vehicle at idle speed

dramatically reduces engine life; 60 minutes of idling is equivalent to between 80 and 120 minutes of driving time. The resulting loss of fuel economy from excessive idling adds up (800 gallons of fuel annually for the average truck). An idling vehicle burns between 1.6 and 2.4 gallons of gas per hour.

With the help of a little driver education and Telargo's Idling Report we have helped our customers learn that their vehicles average between 0.3 to 0.5 hours per vehicle PER DAY of unnecessary idling! That is 0.5 to 1.2 gallons of gas saved per vehicle per day! This is $1.17 to $2.82 saved per vehicle per day. This accounts to average savings of $1.99 * 851 vehicles * 22 working days * 12 months = $447,081.00 annually. In the Middle East, the numbers are much worse. In fact one particular client has over 4 hours a day average idling time. If we work with similar number of vehicles then this customer stands to save over $1,788,325.44 per year on their operations budget. In these uncertain times they look to be able to gain more business by being able to save their customers money.

Over and above the reduction in idling, they are looking to realize additional savings and other benefits as per the chart below:



Don't Make More Waste

Benjamin Franklin's Poor Richards Almanac is the source of the often-quoted phrase, "a penny saved is a penny earned." If good old Ben was writing today, he might well have updated his famous quote to "a dirham saved is a dirham earned", and applied it to the importance of remembering other adage, "if there is time to do it over there is time to do it right" and that "haste makes waste." Our clients seek to reduce the number of times that they do something to the minimum number of times it takes to do the job. If once is enough, then once is enough. Additionally, they seek to reduce the speed of their vehicles. It is not rocket science that tells us that by going slower, we have fuel. Using the Telargo solution, they will be able to find the balance between "time" and "haste".

Conclusion:

Not all trash is waste, some trash is a gold mine of raw materials, and some is just waste. But all waste has to be dealt with, if not be us, then by our children, so it is vitally important not to make waste if it can be avoided.