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Dragon's Den - good to the last drop

By Marisa Reynen

Avid watchers of CBC's Dragon's Den will recognize DRAM Innovations' fuel nozzle drip retainer. Earlier this summer, Dragon's Den aired a special 'Future Now Energy Innovations' episode where three teams, chosen out of thousands of applicants, had the chance to compete for \$100,000 in prize money from Shell. Although the fuel nozzle drip retainer did not take home top prize, DRAM Innovations certainly garnered attention from drivers and investors alike.

The fuel nozzle drip retainer solves the rather pesky problem of delayed drops of gasoline escaping once one has finished pumping at a gas station. Not only does it save your shoes and pant legs, but the estimated 500 million litres of gasoline wasted worldwide each year. And what no longer lands on the ground can no longer be quickly evaporated into our atmosphere, adversely affecting the



The device uses a small screen, or mesh, to create a vacuum to retain drips.

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environment and human health.

The device involves the use of a small screen, or mesh, similar to those employed on household faucets to disperse the flow of water, as well as surface tension and pressure differential properties to create a sort of vacuum to retain the drips. Approximately 89% of the fuel that would have been wasted is retained as a result. The device can be simply added to existing nozzles or incorporated into new designs.

What does this mean for those of us visiting the pumps from time to time? Well, we would no longer be paying for wasted drops of gasoline. The customer would continue to pay for the liquid retained in the nozzle as is the case currently with gasoline remaining in the hose after pumping, which is recycled to the next customer. With the new device, this 'recycled' amount is simply increased slightly by including the gasoline retained in the nozzle, with no loss to the customer or gas station.

Relative to the amount of gasoline used each year, is this considered a big problem? Can it make a difference? Maybe not, but for energy companies looking to set themselves apart from the

competition, this fuel nozzle drip retainer is a great first step. It can be difficult for organizations to take on "sustainability" or to "be green", especially when their business is in oil and gas in a fossil fuel driven world.

An important step towards the goal of achieving sustainability involves changes to existing ways of doing business to have a lesser impact on the environment, and a positive impact on employees and the general public. This step is usually referred to as the one in which the organization is 'going beyond compliance'. No longer is the organization only concerned with adhering to governmental regulations. They are moving from "defense to offense", actively identifying opportunities for operational eco-efficiencies, better waste diversion and management, and ways to make processes cleaner.

Similar devices have been developed in the past. How is this one different? Why is the marketplace more ready now? What sets this device apart from similar devices is that this design does not involve any moving components; it is completely static with less potential for problems or lost functionality. As for market readiness, CEO of DRAM Inno-

vations, Devin Ramphal noted, "green is in, but only if it is convenient." The fuel nozzle drip retainer could be the deciding factor for a consumer comparing two otherwise identical neighbouring gas stations. And this simple choice can have broader implications.

Again, can this fuel nozzle drip retainer make a big difference? 500 million litres of wasted gasoline saved each year is not a small number, but is certainly small compared to the total amount of gasoline used each year. It also brings to mind the "broken window theory", in which it is postulated that a vandalized urban landscape, such as a broken window or graffiti, would lend itself to increased rates of vandalism. In a similar but opposite fashion, might the presence of an effort to save even a few drops of gasoline at the pumps make consumers more aware of the issue of gasoline conservation? That short trip to the grocery store might not seem worth it any longer.

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