

AVIS Colombia is a car rental company that focuses on providing the highest quality standard vehicle rentals while putting customers at the centre of their operations.

AVIS Colombia identified a significant opportunity reduce maintenance costs of vehicles by installing an improved oil filter on part of its fleet. The improved oil filters use an oil bypass technology that eliminates the need for oil changes. AVIS Colombia expects to reduce oil change costs by 81% through decrease labour, decreased vehicle downtime, reduce oil expenses, and reduce oil disposal fees. Additionally, the improved oil filters are expected to increase the performance and life-span of the vehicle engine.

Oil is a pollutant that is detrimental to the environment in both extraction and disposal. Improved oil filters benefit the environment through reducing oil and filter consumption. Through the SIG initiative, AVIS Colombia is expecting an 88% reduction in oil used per vehicle. In response to this strategic opportunity, MEDA awarded AVIS Colombia a Sustainability Innovation Grant of \$ 50,000 CAD, with over \$100,000 CAD investment from AVIS to install 172 filters on larger, business fleet vehicles.

SIG Initiative Targets

As part of AVIS Colombia's sustainability initiative, the company has set internal goals to achieve by the end of the year. AVIS Colombia's achievement against their goals is summarized in the table below.

	Indicator	Target	Progress To Goal
INCREASE	Number of bypass filters installed	172	17%
	Number of staff trained on oil filter installation and maintenance	6	150%
	Gallons of oil saved annually	740	160%
DECREASE	Gallons of engine oil used per vehicle	-88%	113%
	Average cost of engine oil changes for AVIS fleet	-81%	86%



People trained in oil filter installation & maintenance



Decrease in monthly oil change costs

Jaime Escobar Villa, Technical Manager at Trabold shows where the newly installed filters are located in the vehicle

Progress to Date

Taking risk to adopt a disruptive innovation

AVIS Colombia has partnered with Trabold, a German oil filter supplier, to install bypass oil filter technology on its rental vehicles. The bypass technology is a disruptive innovation that eliminates the need for oil changes by reducing 99.7% of contaminants in engine oil. After the Trabold filter is installed, the engine will not require an oil change. Rather, mechanics simply have to change the oil filter and 'top up' the oil, resulting in a reduction of 88% of oil used. Typically, vehicles use an average of 6 gallons of oil to 0.75 gallons per top up (see chart to the left).

While bypass oil filters have been on the market for 35 years, they have not changed the norm of regular oil changes due to influences for the oil industry. Additionally, mechanics are skeptical of the technology and lack of technical knowledge and skills needed to adopt the innovation. To date, AVIS and Trabold have trained 9 employees in filter installation and maintenance procedures. Through the SIG initiative, AVIS Colombia is leading an important market innovation and challenging norms of the transportation industry.

Scaling Impact

The SIG initiative of 172 filters on AVIS Colombia's fleet will provide evidence for a sustainable technology that can be scaled up to other rental companies and businesses that have invested in vehicle assets. Its AVIS Colombia's hope that this initiative is demonstrating the benefits of an underutilized green technology, leading to wider adoption within the industry.

Elimination of Oil Changes Generates Cost Savings

To date, AVIS Colombia has installed Trabold oil filters on 30 vehicles and will expand installation to 172 vehicles by July 2016. The improved technology has allowed AVIS Colombia to realize a 70% reduction in costs associated with engine oil changes. This reduction of costs includes a 44% reduction in oil filter costs and an 83% reduction in oil purchase costs.

