

## Children's Center Benefits From a 'Sip of the Grape'

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founded over 80 years ago. So, the partnership and the relationship between Ford and The Children's Center is very long and very deep."

Established in 1929, The Children's Center provides children's mental health services, and services for abused and neglected children, in Wayne County.

"We really believe that it's important to empower these kids and these families through some very trying times and things like this event tonight just helps solidify the funding that we need to continue to support our mission," said George Winn, CEO of The Children's Center.

Detroit Uncorked was one of several wine-tasting events held so far this year by the Detroit Wine Organization, which has more than 4,000 members across Southeast Michigan.

"We do monthly wine tastings, which are usually about 30 to 40 people and we do that at different restaurants and venues around metro Detroit.

"We tend to theme those depending on the time of year, what's going on.

"In May, we did a South Africa tasting with a World Cup theme. So, we'll try to theme those to expose people to a certain kind of wine, it might be a Spanish tasting or Italian tasting.

"We usually do about three to four medium-to-large events – with 300 or 400 people – per year," said Alix Hollis, executive director of DWO.



PHOTO: STEFANIE CARANO

Susan Pepper at the local wine event benefitting The Children's Center.

## Szopo in Eng. Hall of Fame

Wayne State University has selected several distinguished alumni for induction to the Wayne State Engineering Hall of Fame, including Ford Motor Company executive Doug Szopo.

Szopo, who graduated from Wayne State with a Master's of Science in Engineering Management in 1978, currently serves as executive director of Global Product Planning & Strategy at Ford, a position he was appointed to in February 2007.

During his 30-plus-year career with Ford, he had held a variety of positions in manufacturing, product engineer-

ing and business planning. Most notable of these prior positions was plant manager of the Dearborn Engine and Fuel Tank Plant, design manager for Duratec Engine, and pre-program manager for Advanced Powertrain Systems Engineering.

Other Hall of Fame inductees include Tobenette Holtz of Huntington Beach, Calif., an aerospace engineering manager; Laxmi Narayan Bhuyan of Riverside, Calif., a professor of computer science and engineering and Paul Sgriccia of Livonia, an engineering manager for an engineering services firm.

## Ford Really Takes EcoBoost to the Test

To prove out the new EcoBoost truck engine, Ford Motor Company is putting one randomly selected engine through a series of extreme durability tests, both in the lab and in the field. The torture testing is being filmed for a web-based documentary series that offers viewers a behind-the-scenes look at the development of the new EcoBoost truck engine that joins the lineup of the 2011 Ford F-150 early next year.

The first video, now posted on the site, brings to life the dynamometer testing that new truck engines, including the new EcoBoost pulled randomly off the line at Cleveland Engine Plant, endure. In the coming weeks, web videos at [www.fordvehicles.com/trucks/f150/2011/experiencef150](http://www.fordvehicles.com/trucks/f150/2011/experiencef150), will document the extreme challenges the 2011 F-150 EcoBoost face in the real world.

After undergoing the equivalent of 150,000 miles on the dynamometer, the same EcoBoost engine is dropped in a 2011 F-150 at Ford's Kansas City Assembly Plant before it faces a series of extreme real-world tough truck tests to ensure it exceeds the demands of even the most demanding F-150 customer.

Once out of the lab, the ongoing web documentaries will take viewers on a nationwide journey as the 2011 F-150 EcoBoost's durability, capability, fuel economy and power is proved out in the field.

Challenges include hauling timber, 24 hours of NASCAR, Baja 100 and (engine) tear-down.

The first application of Ford's award-winning EcoBoost technology – which combines direct fuel injection and turbocharging – in a rear-wheel drive truck highlights an all-new class-leading powertrain lineup for the 2011 Ford F-150. Available at launch in late 2010 are a 3.7-liter V6, a 5.0-liter V8 and a 6.2-liter V8, followed by the

new EcoBoost truck engine, available in early 2011. This marks the most extensive engine makeover in the 62-year history of Ford F-Series. Animators of key technical features of all four new engines will be available at the site as well.

The new EcoBoost truck engine's turbocharging and direct fuel injection are particularly relevant to F-150 customers looking for the power to haul and tow heavy loads. This unique EcoBoost truck engine delivers impressive low-end torque and maintains it across a broad rpm range, which is key in towing applications. Approximately 90 percent of the EcoBoost truck engine's peak torque of 420 foot pounds is available from 1,700 rpm to 5,500 rpm, EcoBoost's 420 foot pounds of torque is more than any other competitive half-ton truck.

The F-150 EcoBoost also tows a best-in-class 11,300 pounds and delivers an impressive 365 horsepower. Combine that with the fuel economy of a V6, and it is a combination competitors can't match. And it's all done on regular fuel.

Three avenues that test and validate all truck engines are computer analysis, laboratory work and in-vehicle exercises. All the tests together replicate more than 1.6 million miles of customer usage – the harshest-use customer. A customer profile reflecting extreme-use driving style, road types and vehicle usage, including maximum towing and payload situations, was developed to underpin the testing program.

For the 2011 F-150 EcoBoost, that includes analytical time, dynamometer testing at full boost, in-vehicle test time, thermal test cycles ranging from 20 degrees Fahrenheit to 235 degrees Fahrenheit, fatigue testing with engine run-



PHOTO: FORD

Ford recently unveiled the F-150 Off-Road Race Truck, equipped with an EcoBoost engine. Ford is testing the engine now.

ning nonstop between peak horsepower and peak torque and road tests.

A recent proving drive, for example, included accumulating nearly 1,500 miles across Arizona, Nevada, Utah and California. The 2011 F-150 EcoBoost traveled up grades as high as 14 percent, with elevations ranging from a few hundred feet below sea level to more than 12,000 feet, in temperatures ranging from 28 degrees to 108 degrees.

Each web-based documentary is narrated by Mike Rowe of "Dirty Jobs," seen on Discovery Channel. Rowe hosted a series of videos last year on the development of the all-new Ford-engineered, Ford-designed and Ford-manufactured 6.7-liter Power Stroke V8 turbocharged diesel engine, which recently won the Ward's Automotive Diesel Shootout.

"Mike Rowe is a tremendous part of helping us communicate the outstanding attributes of our new EcoBoost truck engine and its unbeatable combination of durability, power, capability and fuel economy," said Doug Scott, Ford truck group marketing manager. "Mike resonates very well with our Ford F-Se-

ries customers because he is authentic and no stranger to tough work."

## 'Mentors' To Launch On Oct. 12

To support its mission, Women in Defense (WID) Michigan will launch a mentoring program on Tuesday, Oct. 12, during its War Figher Panel Event at the Management Education Center in Troy.

"The program is designed not only to assist WID members wishing to take advantage of the wisdom and experience of a mentor, but also to offer mentor volunteers an opportunity to pass on a legacy that will influence the next generation of defense community members," said Julie Wood, secretary of the WID Michigan chapter and business manager at World Technical Services, Inc.

Women in Defense is actually open to both male and female members. Visit the organization online at [www.wid-mi.org](http://www.wid-mi.org).

## OEMs and Suppliers Meet to Discuss Auto Emissions

By Jim Stickford  
Staff Reporter

Greenhouse Gas Emissions produced during the manufacturing process are on the minds of every carmaker, and the first step in reducing those emissions is developing a way that everyone can use to measure them.

Simply put, in order to fix a problem, metrics are needed to define it and the effectiveness of potential solutions.

Manufacturers "can't manage what they can't measure," said Mary Sotos of the World Resources Institute (WRI) when she spoke at the Automotive Industry Action Group's (AIAG) inventory guideline symposium Sept. 28 at the Michigan State University Management Education Center in Troy.

Luke Contos, global health, safety and environment management for TRW, moderated the symposium.

He said, "The goal of the event is to educate people on our common process that has been developed to measure greenhouse gas (GHG) emissions generated from the making of motor vehicles."

"The OEMs and their suppliers have come together to have one process everyone can use and understand. We

want to avoid a situation where one OEM measures emissions one way and another OEM has a different process. Suppliers don't want to have to have 10 different systems to deal with."

The whole purpose of AIAG is to create efficiencies for OEMs and their suppliers, Contos said. No one wants a Betamax versus VHS situation.

To that end, AIAG chose WRI and its format to create a consistent answer to the question of carbon footprints, Contos said.

Once an industry-wide standard is adopted, OEMs can measure supply-based impacts on their carbon-emission footprint, Contos said.

This information gives OEMs the opportunity to make informed choices, he added. If a manufacturer has two suppliers providing an identical product and one produces considerably fewer emissions in its manufacturing process, the OEM now has the option of reducing its overall carbon emissions footprint by going with the more efficient supplier.

"We started the process of determining just how carbon emissions would be measured in earnest in January," Contos said. "Everyone has been talk-

ing about this for the past couple of years, but the downturn had all our minds elsewhere.

"But, we have seen the future and knew the OEMs would want this information. They are being asked by Non-Governmental Organizations (NGOs) for information. So it all started rolling downhill and we started coming up with one process."

Sotos said determining just what carbon emissions should be attributed to a company can be trickier than most people first imagine.

There are the obvious sources. Emissions from the OEM's factory. But what about emissions from the vehicles driven by employees on their way to work? Do you count emissions from supply trucks after a delivery?

Emissions measurements can change according to organizational boundaries, Sotos said. If a company has three subsidiaries and the one that produces the most emissions is half-owned by another company, how do you measure output?

Given these circumstances, there are three different methodologies that can be used to measure a company's carbon emissions.

One method is called the

equity share. Under this technique, if a company owns 50 percent of a plant, it's assigned 50 percent of the emissions to its total carbon footprint. If the firm owns 85 percent, it's assigned 85 percent of the emissions, and so on, Sotos said.

Another technique is called the control approach, which is based on financial control. Who has the ability to influence or direct financial policies? Who has what financial voting rights?

Using that technique, you account for 100 percent of emissions for each operation under your financial control.

The third technique is called operational control. Using that method, emissions are assigned to the company that has operational control of a plant.

"There are different methodologies," Contos said. "We chose WRI because whatever methodology an OEM prefers, they'll be using a common (format) and a common methodology because WRI gets to set the boundaries of whatever method is chosen."

Contos said they didn't want to limit the choices of OEMs when it comes to choosing a measurement methodology. Most prefer to use operational control, but

not all of them.

"Transparency requires companies to disclose whatever method you have chosen," Sotos said. "Also of great importance is accurately determining emissions for your base year."

The base year is the measure used to determine whether a company is increasing or decreasing carbon emissions. Companies might want to recalculate their base year when they make a significant acquisition or when measuring techniques have improved to such a degree that the old figures can now be considered inaccurate.

Organic growth is the goal of every company, so that shouldn't affect base year figures, Sotos said. Also, if a company outsources, say, transportation and hires a firm to take on that job, it shouldn't suddenly say its carbon emissions have declined. Trucks are still doing the same job as before. It doesn't matter if someone else is doing it.

At the public question-and-answer session, one audience member said that, in the United Kingdom, emissions are credited to the company whose name is on the electric bill. Another audience member said companies have to be careful if they're serious about truly measuring their carbon footprint because "there's always a reason to change your base year" to make your company look better.

Suppliers have supported AIAG's efforts because in this global world it's no longer smart or efficient to have a North American way of doing

something along with a European way and an Asian way, Contos said.

AIAG was able to speak with and use the expertise of experts from all the companies – both supplier and OEM-involved, Contos said. The technical details will be made available by AIAG online beginning in the early part of the fourth quarter.

AIAG is working with both Japanese and German manufacturers in promoting the adoption of universal standards.

"This is the first of several events in regards to sustainability," Contos said. "We want people to understand and we want them to want to participate. We don't want everyone going off in a different direction."

Contos described the talks on how to normalize GHG reading techniques as "vibrant." But he added that no technique will satisfy everyone 100 percent.

"There's no magic bullet," Contos said.

Ironically enough, the AIAG symposium in Troy was actually held the same week as the larger DEER national engine conference at the RenCen Marriott in Detroit.

All of this attention on emissions, particulates, diesels and the like indicates that the auto industry, facing more and more severe emissions and fuel economy challenges, is reaching out to a wider constituency of experts in order to meet these prevailing goals and challenges.

The world of emissions is even more important to autos than ever before, considering the regulatory climate.

## Ford Road-Tests AIAG Guidelines For Measuring Carbon Emissions

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estimation methodology is still evolving.

whose emissions are higher than allowed, purchase the emissions from another company whose emissions are below the permitted level.

This cap-and-trade policy can create incentives to reduce emissions because these reductions become revenue generating, Newton said.

Ford learned a lot during the testing process, he said. The

Ultimately the information collected using WRI's final Scope 3 measurement system should be good for businesses and the economy because they will pinpoint where efficiencies can be made. Companies will have the information needed to make informed decisions on how procedures can be improved while at the same time reducing GHG emissions.

## Make Sure Emissions Data is Accurate – GM's Hildreth

By Jim Stickford  
Staff Reporter

Alfred Hildreth, GM's energy manager, spoke at the Automotive Industry Action Group's (AIAG) recent symposium in Troy at the Michigan State Management Education Center about data quality assurance issues and trends.

The symposium detailed greenhouse gas (GHG) inventory guidelines being established for OEMs and suppliers so that they can provide governments and others with accurate figures about their carbon emission footprints.

Hildreth was one of several speakers. His topic dealt with developing strategies for data quality, an important consideration when examining carbon emission outputs.

"You need to make sure errors don't occur," Hildreth

said. "Corporate goals determine the levels of accuracy. Are you doing it to give information because the government requested it? Are you responding to customers, to non-governmental organizations (NGOs)?"

The flow of information is important, Hildreth said. Once goals have been established, a company needs a strategy to implement them. Hildreth said invoices from suppliers are excellent ways to get information.

"They tell you how much energy you've bought and it's accurate," Hildreth said.

It's vital that companies normalize their data and they need a system that can quantify their conservation activities, Hildreth said. That tells you if what you're doing is working.

When checking your figures

against your base year, doublecheck them and make sure the base year is "reasonable," or average, Hildreth said, adding that when you compare figures against the base year, make sure you're comparing June numbers against June numbers.

Ineffective management and inadequate training are errors to avoid, Hildreth said, noting that the best system in the world is useless if it can't be implemented right.

That means companies must train workers properly in the established protocols.

Even simple math errors can hurt, Hildreth said. Common mistakes include wrong conversion for units, mistaking inches for centimeters.

GM has 326 facilities in 34 countries, Hildreth said. Different governments require information in different ways.