

# THE WALL STREET TRANSCRIPT

Connecting Market Leaders with Investors

## Clean Diesel Technologies, Inc. (CDTI)



**CHARLES CALL** joined Clean Diesel as Chief Executive Officer and Director in 2010, immediately following the business combination of Clean Diesel and Catalytic Solutions, Inc. Mr. Call served as CEO and Director of Catalytic Solutions, Inc. from 2004 to 2010. His prior experience includes seven years at Imperial Chemical. He also served as President of JPE Trim from 1996 to 1997, a manufacturer of automotive exterior trim products supplying the major automotive companies. Before JPE, he served as President of Dexter Automotive Materials, a supplier of coatings, adhesives and acoustical materials to the major automotive companies. Mr. Call received a B.S. from Rochester Institute of Technology, New York.

### SECTOR — ALTERNATIVE ENERGY

**TWST:** Please begin with a brief overview of Clean Diesel, including some highlights from your history and a summary of your main products and technologies.

**Mr. Call:** We are the merged entity of Clean Diesel Technologies, Inc. and Catalytic Solutions, Inc. — two technology-based companies both established around 1996. The original Clean Diesel developed numerous technology patents, roughly 160, and their business model was created mainly around the license and sale of technology. They developed some very good technology for fuel-borne catalysts, whereby the fuel is injected into the combustion stream, primarily into the combustion chamber. During this process, the fuel actually starts a chemical reaction that reduces things like NOx and diesel particulate matter. Clean Diesel also developed an injection system for reducing NOx and licensed it to companies like Bosch and Tenneco. Catalytic Solutions used catalyst technology to reduce emissions, but the product was coated onto substrates, which became part of the exhaust system — an approach quite different than Clean Diesel's. The conversion of the emissions into harmless or less harmful materials happens in the catalyst itself on that substrate. Catalytic Solutions went on to develop their base technology, which was sold to companies like Honda, General Motors, Ford and Renault — as well as a series of products for diesel engine vehicles and equipment and energy-related applications for natural gas turbines and boilers.

In essence, Catalytic Solutions focused on developing and selling technology-based products, while Clean Diesel's

focus was primarily on inventing and licensing technologies, two rather different business models. The merger came about as both companies were looking for a way to go after the extremely large diesel-emission-reduction market. Combined, we are now a much stronger technology company, better positioned to address the exciting and substantial global opportunities in this market, and we view ourselves as a specialist in this space. We are actually providing the entire emission reduction system, and that's really where we see our market for the future. In large part, by bringing the two companies together, we've created a very strong company that's able to provide a majority of the technologies required to serve diesel emission reduction needs. The new Clean Diesel will continue to develop technologies and use patent protection as appropriate. Technology is our lifeblood and how we compete. It's how we bring value to customers, and we will always be a technology-based company focused on environmental catalysis. We will continue to license where it makes logical sense.

**TWST:** Are there any regulatory reforms on the horizon that could provide opportunities for you? And conversely, are there any that could pose a risk to the company?

**Mr. Call:** Outside of the U.S., in the European Union, there are well over 100 low-emission zones in operation already, with more than 100 in the planning stage. In some cases, a first or second phase may already be completed, with a third under consideration. In other cases, it may be the first time that significant emission control has been undertaken. For example, the London Low Emission Zone is entering its third phase of emission reduction. The first phase, which went on for several years but expired

in 2008, was back when London taxis were all little black diesel cabs that had no pollution control and spewed the same black stuff you generally see coming out of diesel engine vehicles.

The second phase occurred in 2008 and targeted a segment of heavy diesel commercial vehicles that delivered goods in and around London, such as DHL and FedEx delivery trucks. This second phase was the first significant opportunity for Clean Diesel to market and sell its emission reduction products, picking up a portion of that market share despite not having a complete system offering at the time. In 2011, the City of London is going after approximately 17,000 remaining commercial vehicles that service the city. Transport for London, the agency within the London City Government that is managing the project, estimates approximately \$60 million worth of product will be installed in 2011. The benefit for us as the new Clean Diesel is taking a combination of what was

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Catalytic Solutions technology and what was Clean Diesel technology and combining it into systems that will address virtually all the requirements for those 17,000 vehicles, and we hope to get a fair share of that business.

All the low-emission zones will take a similar approach in terms of phased-in operation. So it's going to be over a number of years, and the phase that will come in London after all the black smoke, or diesel particulate matter is removed, will be a phase to reduce nitrous oxide. Since NO<sub>x</sub> has not yet been addressed in current low-emission-zone work, there will likely be a Phase 4. So in Europe, low-emission zones are in place with much more to come. We're also quite excited about the potential in Hong Kong. Discussions are underway now as there is certainly a need for a low-emission zone in the City of Hong Kong due to the high number of diesel vehicles in operation there. They will likely take a similar phased-in approach. We expect to see one or two cities in Taiwan have a low-emission zone, and we know that there has been work in Singapore.

In Asia, we are beginning to see planning for low-emission zones and we hope to see that continue around the world. In North America, California suffered a setback where the state's Air Resources Board decided to postpone off-road emission reduction requirements for heavy construction equipment due to a struggling economy. In California, when the housing market was strong and everything was developing, CARB looked at off-road diesel emissions as a source that needed to be addressed. Vehicle emissions actually decreased when the economy tanked and the building of houses and malls, etc., slowed down.

However, for a class of fairly large on-road trucks, California has recently announced additional vehicle model years requiring retrofit, up to around model year 2007 when this emission equipment began to be installed at the factory. There are actually 170,000 vehicles in the State of California that the Air Resources Board is now targeting for emission reduction.

So simple math says this is likely a very good market opportunity. We're also seeing EPA ratings kick in for some more on-road things. A significant piece of legislation recently passed by the Feds was the expansion of the Diesel Emission Reduction Act that President Obama recently signed. It's been extended for five years and increases government spending levels to \$100 million in order to focus on diesel emission reduction for existing fleets. So that's good news for us. I won't make a political statement, but certainly the current administration is a lot more attuned to environmental things than in the past. We're also seeing a lot of activity now in New York State school bus programs, and we are beginning to see activity in Massachusetts and New Jersey to reduce diesel emissions. So the message is, these are all efforts to take existing vehicle fleets — and diesel vehicles last for many years, 12 to 15 years is very common — and retrofit emission reduction devices on them.

**TWST: It sounds like most imminent opportunities for your company are in Europe and Asia, with some in the U.S. Would you tell us a little bit about how you are positioning yourself in those various geographies to take advantage of these opportunities?**

**Mr. Call:** Our very strong group in London, which was successful with low-emission zone work in 2008, has now been combined with our team in Malmö, Sweden. As a result of the merger, we now have a significant presence in Europe. There is a low-emission zone coming up in Germany this year, planning for which has already started, and one coming up in Italy. We feel good about where we are in terms of the quality of people and our capabilities. We now also have business development people in Asia, whereas we didn't before. So business development is preliminary, but we are working on the Hong Kong opportunity. We are a small company with high-quality resources available that we didn't have before. We have a joint venture in Asia that was formed with a company called Tanaka on the catalyst side, and we are working with them on an opportunity in China. They are a very good privately held Japanese company with \$3 billion turnover and are about 107 years old; an excellent technology company. In addition to these global opportunities, we have also strengthened our U.S. organization with the combined team. Those are things that we're doing that help us.

**TWST: Tell us about your existing customer base. And with the merger, how do you see that customer base changing this year or next year?**

**Mr. Call:** Our business is split into two target markets — coated substrate catalysts and heavy-duty diesel systems — both of which utilize our proprietary patented mixed-phase catalyst (MPC®) technology. Catalytic converters are quite expensive due to the content of precious metals such as platinum, palladium and rhodium. Our unique catalyst technology provides increased catalytic performance and value to our customers, with reduced platinum group

metal content. We sell our coated substrate catalysts to companies like Honda and Renault, and we're still selling to GM, as well as working with other car companies. So we tend to work with technology-focused companies and we will continue to do so.

On the heavy-duty diesel systems side, which is really where we believe our growth opportunity lies, we have a large number of small customers. It's an interesting mix. In North America, PACCAR and International have become dealers and distributors for us. So the people who sell a PACCAR truck in the San Francisco Bay area will also sell and install our emission control systems, our diesel technologies that take out particulate matter thoroughly. We also work with local fleet owners. In Chicago, for example, it could be the refuse trucks that pick up garbage, most of which are diesel vehicles. Some have gone to natural gas, but approximately 90% of them are diesel, and their emissions, if they haven't already been addressed, will be addressed by state agencies at some point in time. We also work with school bus fleets, either owned by school districts or third-party service providers, and small-fleet owners. These fleets can range from hundreds to thousands of vehicles. The key point is we tend to have a large number of small customers spread out all around North America and into Europe. So on the systems side, it's not a lot of big names.

**TWST: What types of cost-savings and synergies will you be able to achieve as a result of the merger?**

**Mr. Call:** We expect a reduction in redundant operating expenses previously incurred by both companies. Additionally, we expect technology, product and sales synergies due to the complementary nature of our technologies, as well as our distribution strengths in different geographies.

**TWST: What is your competitive landscape like? And particularly post-merger, what things are you doing to stay ahead of the curve?**

**Mr. Call:** On the diesel system side, which is our primary emphasis, it's a very interesting landscape. There is, at this point in time, no single large competitor in any of those regions. There are companies that originate in Europe and try to sneak into North America and vice versa, but it's very fragmented and made up of a lot of smaller privately held companies, around \$10 million to \$30 million in size. We believe that we are one of the stronger players in this market. I think there are quite a few very good players out there, and only a couple of them are corporate-owned. For instance, Donaldson, a Midwest company that makes a lot of filtration devices, has a division. Donaldson is a very good company, but they have a small business that's in the emission control arena.

After that, we don't see a lot of corporate players, so we think it's a very good place for us to be. We are very pleased with our technology and the capabilities we have in this marketplace, and we think we can do well with it. We hope to grow this business organically and frankly, also via acquisitions. We have done a couple of deals already. Several years ago, we acquired a systems company that gave us entry into the heavy-duty diesel systems market. That company has been around for 30 years now, so already had very good experience in the space. Then, the recent merger provided us with even more technology and better geographic coverage. We believe there are a number of acquisition opportunities out there and we aim to become a world-class competitor.

**TWST: Your revenue increased in the third quarter, and in your 10Q you attributed that increase in part to your efforts to get into the retrofit business. Are there any specific customer wins or projects that contributed to that increase?**

**Mr. Call:** For the third quarter, it's more business as usual, and a lot of those small wins came from a lot of small customers. When we look forward a bit, it's going to be things like the low-emissions zones in London where we believe there is significant opportunity in 2012. That's going to be a significant opportunity for us.

**TWST: What are the key risks for your business in 2011 and how are you and your team working to minimize the negative impact of those risks?**

**Mr. Call:** The main risk factor affecting business in our industry is the strength of the economy. There certainly are signs that suggest we are coming out of the recession. We still see the ability in North America, particularly in the U.S., to fund ongoing emission control, but it remains a challenge. Although certain regulations have been postponed by CARB, as previously described, we believe there will be continued pressure to reduce harmful emissions of known carcinogenic materials in spite of economic adversity, as we have seen in London with the low-emission zones. So it's the commercial and business pressure on emission reduction that's the largest risk. The next is obviously not how strong the competitors are and how well they execute, but how we do.

**TWST: What are your top strategic goals that investors should look for you to achieve in 2011?**

**Mr. Call:** The first one for us is to have a successful year in the low-emission zone. That's very, very critical to us. The second one is the final transition to internalize our outside catalyst supply for the heavy-duty diesel systems business. By the end of this year, essentially all catalyst technology will be supplied from within the company, resulting in better-performing catalysts at a lower cost. For a small company, keeping that cash inside the company is quite a significant piece. Another goal is to successfully complete the merger integration process, which will be demonstrated in part by our success in the low-emission zones and also by how we are able to take advantage of the increased opportunities created with the combined technologies and synergies of the new Clean Diesel Technologies.

**TWST: Thank you. (MES)**

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