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EDITED TRANSCRIPT

CAT - Caterpillar Investor Day

EVENT DATE/TIME: SEPTEMBER 12, 2017 / 3:00PM GMT

THOMSON REUTERS

CORPORATE PARTICIPANTS

Amy Campbell *Caterpillar Inc. - Director of IR*

Bob De Lange *Caterpillar Inc. - Group President of Construction Industries*

Brad Halverson *Caterpillar Inc. - CFO & Group President*

Jim Umpleby *Caterpillar Inc. - CEO*

Denise Johnson *Caterpillar Inc. - Group President of Resource Industries*

Rob Charter *Caterpillar Inc. - Group President of Customer & Dealer Support*

Tom Pellette *Caterpillar Inc. - Group President of Energy & Transportation*

CONFERENCE CALL PARTICIPANTS

Andy Casey *Wells Fargo Securities, LLC, Research Division - Senior Machinery Analyst*

Chris Weltzer *Anchor Bolt Capital - Analyst*

Cliff Ransom *Ransom Research, Inc. - Founder and President*

Eli Lustgarten *ESL Consultants, Inc. - President*

Ivan Feinseth *Tigress Financial Partners LLC, Research Division - Director of Research*

Jairam Nathan *Daiwa Securities Co. Ltd., Research Division - Research Analyst*

Jamie Cook *Credit Suisse AG, Research Division - MD, Sector Head of United States Capital Goods Research, and Analyst*

Jerry Revich *Goldman Sachs Group Inc., Research Division - VP*

Joel Tiss *BMO Capital Markets Equity Research - MD & Senior Research Analyst*

Joe O'Dea *Vertical Research Partners, LLC - VP*

Nicole DeBlase *Deutsche Bank AG, Research Division*

Ross Gilardi *BofA Merrill Lynch, Research Division - Director*

Steve Volkmann *Jefferies LLC, Research Division - Equity Analyst*

Steve Fisher *UBS Investment Bank, Research Division - Executive Director and Senior Analyst*

Tim Thein *Citigroup Inc, Research Division - Director and U.S. Machinery Analyst*

Ben Coyne *Citadel - Analyst*

Rob Wortheimer *Melius Research - Analyst*

PRESENTATION

Amy Campbell - *Caterpillar Inc. - Director of IR*

So welcome everyone to 2017 Investor Day here at Tuscon. My name is Amy Campbell, Director of Investor Relations for Caterpillar. Before we get started with today's presentation, I want to go through a little of housekeeping.

Today's presentation is copyrighted by Caterpillar Incorporated. Any use or transmission of it without the written consent of the company is strictly prohibited. We will be posting a copy of the transcript to the Investor Relations section of our caterpillar.com website.

We will also be making forward-looking statements that include certain risks, uncertainties or assumptions that could cause actual results to differ materially from those forward-looking statements. A discussion of those risk factors that could cause actual results, either individually or in the aggregate, to cause actual results to differ materially from the forward-looking statements can be found in Caterpillar Forms 10-Q, 10-K and other filings with the SEC.

You can also find a reconciliation of non-GAAP financial information that will be referenced in this presentation in the appendix of the presentation that we posted to our website.

So let's quickly go through the agenda. We're going to get started today. I'm excited to have Jim Umpleby and the full executive office here with me, and we'll start with Jim going through the strategy update and the work that he and the team have been doing over the last several months. And that will be followed by segment updates. We'll start with Bob De Lange who will give an update on Construction Industries; Denise Johnson who will give a review of Resource Industries; and then we'll take a 30-minute break. We'll come back and Tom Pellette will give us an update on Energy & Transportation; Rob Charter on Customer & Dealer Support; and then we'll conclude with prepared comments for today's presentation with the financial review by CFO, Brad Halverson. After that, we'll take another short break so that we can set up for Q&A. We'll bring up all of the presenters and we'll have 45 minutes for questions here in the room.

And with that, I'm excited to turn it over to our CEO, Jim Umpleby. Welcome, Jim.

Jim Umpleby - *Caterpillar Inc. - CEO*

Thank you. Well, good morning and thank you for attending our 2017 Investor Day. I hope you enjoyed the demonstration of engineering, technology and power yesterday at our Tinaja Hills facility.

From our very beginning in 1925, Caterpillar has built the equipment that has helped build a better world. We sell more than 300 products under 21 brand names, with a field population of more than 3 million machines and engines. You will see our equipment at work all over the world on land and at sea. Our diverse, skilled workforce designs and manufactures the products that have made Caterpillar among the most widely recognized and respected brands for almost 100 years.

But most importantly, Caterpillar is dedicated to our customers' success. It's our customers that use our solutions to build a better world: through projects that give people access to clean water, electricity, transportation, hospitals, schools and so much more.

After being named CEO last October, I formed a Strategic Planning Committee as many of my predecessors have done when they became CEO. This diverse, cross-functional team of Caterpillar leaders evaluated our business and developed a strategy, metrics and governance to profitably grow our company. We will build upon our many competitive strengths, and we are well-positioned to compete and grow.

Our competitive advantages include our independent dealer network with more than 170 dealers and 2,000 branches in 190 countries around the world. It is the most extensive sales and service network in our industries. When our customers buy our products, they know they will be supported by the most capable and reliable global service network.

We also have a well-earned reputation for the best product line, with the most productive equipment and superior product quality. As a result of our product and dealers, we are a leader in almost all of our product classes in a majority of our markets.

Caterpillar is well-positioned for the future as our customers invest in infrastructure, energy and mining to meet the needs of a growing population, an emerging middle class in the developing world and an increasingly urbanized society.

Our company has emerged stronger from the longest downturn in our history. As you know, generally weak economic conditions and commodity price volatility have made the last few years challenging. Our sales and revenue dropped more than 40% between 2012 and 2016. We responded to this challenge with a strategic approach to restructuring and implemented a number of actions to improve our competitiveness.

Despite lower profits, our balance sheet has remained strong because we took the tough actions required to reduce our cost structure and generate solid cash flow. Our dividend was a high priority throughout the difficult economic cycle and will continue to be a high priority. Caterpillar has paid higher dividends to its shareholders for 23 consecutive years and since 2007, our cash dividend has more than doubled.

Between September 2015 and the end of 2016, we consolidated or closed more than 30 facilities and our total workforce declined by 16,000. Our product quality remains at high levels. We continue to invest in R&D to improve our competitiveness. We've made progress implementing lean manufacturing and our dealer network has strengthened. We've demonstrated the ability to effectively manage our company during the most severe downturn in our 92-year history.

Much of what I've discussed so far, you already know. Caterpillar is a world leader with great products, services and solutions and an unmatched dealer network. We're well-positioned to capitalize on long-term macroeconomic trends like a growing world populations and urbanization.

So let's shift gears and talk about the future. As we worked on the strategy, we never lost sight of what Caterpillar has been doing for more than 90 years: helping our customers raise living standards and build a better world. We wanted a simple purpose statement [to capture] that for our employees, our customers, dealers, partners and shareholders and that statement is: Our solutions help our customers build a better world.

We've also summarized the components of the new strategy in a graphic that illustrates how we started to manage the company differently during the last few months and the strategies we're implementing.

I'll briefly describe the components of the new strategy, which you can see on the graphic on the screen. First, our overriding objective is to grow profitably. We are pursuing profitable growth by reinvesting in our strengths. We're expanding services with an emphasis on the aftermarket. We're extending our product offerings and we intend to deliver operational excellence. To deliver value for our shareholders, we know we must deliver exceptional value to our customers and improve alignment with our business partners, particularly our dealers. We must also retain, attract and develop the most talented team of employees.

Our long-standing code of conduct, our values in action, define what we do, everywhere we do business. They define how we behave with our customers, our partners, our suppliers and one another. We expect every employee to live our values every day in everything we do, everywhere we are.

We have begun using the operating and execution model, or the O&E model, to manage our business for some time, but now we are expanding it across the enterprise and strengthening its governance. This will be reflected in how we develop strategies, allocate resources and monitor and manage performance. We are focused on fixing businesses that are not producing acceptable returns and investing more resources in areas with the best opportunity for future profitable growth.

And finally, but most importantly, we are focused on providing an increased level of value to our customers. We want to ensure they are more successful working with Caterpillar than they are working with our competitors.

You won't hear any lofty sales goals today. The targets my colleagues will describe in the segment and financial presentations are built around improved profitability at sales levels that have already been achieved historically. We will use the Caterpillar O&E model to drive profitable growth through margin expansion, asset efficiency and expanding our offerings, especially services. We will be disciplined in our investing, using the O&E model to guide our resource allocation methodology.

Due to our strategic approach to restructuring, we believe our manufacturing capacity is sufficient for the foreseeable future. So capital expenditures will be less than depreciation and amortization for some time. We will be disciplined in our capital allocation throughout the cycle and laser-focused on getting returns on our investments. Internally, our measure of profitable growth will be operating profit after capital charge or OPACC.

As part of the O&E model, each business has developed multiyear strategic growth plans. We've implemented a governance process that reviews progress against milestones. We'll bias our resources to the businesses with the largest opportunity for future OPACC growth.

By creating value for our customers, each business should deliver a return above its cost of capital and generate the cash flow needed to continue to reinvest in profitable growth. Prioritization and reinvestment in those areas where we have or can develop a competitive advantage are keys to the future success of Caterpillar and our dealers.

We've also chosen to withdraw investment from some businesses, like vocational trucks and some underground mining products where we didn't have a line of sight to a competitive advantage or acceptable returns.

We have proven that the O&E model works through early adoption in Construction Industries and the results speak for themselves. From 2003 (sic) [2013] to 2016, CI's profit margin increased from 7% to 11%, even while their top line dropped about 20% or more than $4 billion. This same disciplined approach of the operating and execution model is being applied across the enterprise.

Our group presidents are going to detail how our strategy impacts their businesses, but I'll highlight a few specific points. As I mentioned earlier, you will see an emphasis on services, especially the aftermarket. We, along with our dealers, plan to redouble our efforts to help our customers be more successful with us than any one of our competitors by having the best services and solution offerings in the industry.

These services and solutions will include unmatched aftermarket support through enhanced digital capabilities. Caterpillar currently has more than 500,000 connected assets and we are investing to increase the number of connected machines and engines. This will allow Caterpillar and our dealers to expand the range of services that enhanced digital capabilities allow us to provide to our customers, enabling them to operate more efficiently, productively and safely.

We'll continue investing to improve parts availability and service coverage with our dealers which are critical to our customers' success. We're also going to make it easier for our customers to buy Caterpillar parts online.

We plan to deliver better efficiency and productivity to our customers through increased efforts to secure customer support agreements every time we sell a new piece of equipment. Then we want to make sure those CSAs are renewed. We have dealers that are already demonstrating best practices in executing CSAs with our customers. That model can be replicated across the dealer network and we're developing internal metrics to track progress.

Our emphasis on services will not only help make our customers more successful, it will also lead to greater aftermarket opportunities and more profitable growth for Caterpillar. Again, our goal is to ensure our customers are more successful working with Caterpillar and our dealers than they are working with competition.

Growing our market share is also fundamental to our future success, but we need to do so profitably. We will drive for growth in our installed base through expanded offerings, providing the right products and solutions for the industry at the right price points, while also earning an acceptable return for us and our dealers. Construction Industries has already begun introducing expanded offerings with life cycle value products to improve our competitiveness. We will also provide an increased range of options, so our customers can choose the design that best fits their needs.

In Energy & Transportation, we recently acquired Kemper Valves & Fittings to expand our oil and gas well servicing offerings to include flow iron. We now offer an engine, transmission, well stimulation pump and flow iron as a complete solution to our oil and gas customers. We are pleased with the timing of this acquisition. These are just a few examples of how we are serving our customers and growing through expanded offerings.

Operational excellence, which includes organizational alignment, will also be one of the keys to our future success. We've made organizational changes to better align responsibility for profitable growth. Earlier this summer, we decentralized additional decision-making to allow more autonomy at the business units. We've enabled our business leaders to make decisions more quickly and have more control to execute their growth strategies and successfully compete in their industries. We'll have more agile groups at the center and maintain strong governance practices.

We're also fully committed to our lean manufacturing journey, synchronizing across the value chain, reducing lead times, optimizing working capital and increasing availability. We will also continue to focus on excelling at the fundamentals of safety, quality and cost control. We'll never relent on our unwavering commitment to safety. We have a remarkable record of improvement and world class safety levels. However, even one injury is one too many. Our product quality remains high, and we will continue as a zero-defect mentality. We'll also remain committed to controlling structural costs and maintaining cost flexibility. And finally, above all else, we'll be guided by our values in action.

Our team sees clear competitive advantages and tremendous opportunities ahead. With a disciplined approach to managing our great company, we don't have to be dependent on industry growth to generate superior profit growth and shareholder value.

At this point, I'd like to recognize and thank my colleagues in the executive office who helped to develop the strategy that you'll see later this morning. Many of you have had the opportunity to meet Rob Charter, Brad Halverson, Denise Johnson and Tom Pellette, who are experienced and outstanding group presidents. We also have 3 new additions to our executive team this year. Bob De Lange, who started his career in his native Belgium, is now Group President of Construction Industries; Cheryl Johnson, our Chief Human Resources Officer, recently joined Caterpillar and will lead our efforts to develop our most important asset, our global team of employees; Suzette Long, recently assumed the role of General Counsel and Corporate Secretary. I'm very fortunate to be working with such a talented team of senior executives.

Since the first of the year, we've moved our global headquarters from Peoria to the Chicago area. The new location improves access to global customers, dealers and our worldwide operations, while also enhancing executive recruitment. We've also continued to evaluate our operations. We're moving production out of our Aurora, Illinois facility and closing our facility in Gosselies, Belgium, both of which are legacy Caterpillar facilities.

To summarize our strategy and our disciplined approach: First, we'll focus on ensuring our customers are more successful using our products and working with our dealers than they are the competition.

Second, we'll use the operating and execution model to intentionally bias our resources to those opportunities that represent the best future profitable growth.

Third, we're increasing our investment and emphasis on services, including digital capabilities and the aftermarket.

Fourth, we'll drive market share growth in our installed base through expanded offerings, providing the right products and solutions at the right price points, while also earning an acceptable return for Caterpillar and our dealers.

Fifth, we're focused on improving the operational performance of our company through organizational alignment, accelerating our lean journey, striving to achieve world-class safety and quality standards and developing a competitive and flexible cost structure.

And finally, our strategy means measuring success by the value we bring to our customers, the profits we generate to fund reinvestment and the returns we generate for our shareholders.

I'm confident in our team's ability in this strategy and I'm confident Caterpillar is well positioned to compete and grow profitably.

Thank you. Now I'd like to introduce Bob De Lange, Group President of Construction Industries.

Bob De Lange - *Caterpillar Inc. - Group President of Construction Industries*

Well, good morning. I'm Bob De Lange and I'm really excited to have the opportunity to give you an update on Construction Industries this morning. And at Caterpillar, when we say Construction Industries, in reality, we mean a very wide range of customers, markets and applications, everything from general construction to heavy construction, quarry & aggregates, paving, ag & landscaping and specialty markets like industrial & waste and forestry just to name a few.

In terms of our products, CI is made up of 3 main divisions: earthmoving, excavation and building construction products. So this picture gives you a view of our key product families that roll up underneath our Construction Industries' financials. The top left you see our medium tractors, one of the earliest products that Caterpillar built and a key part of our legacy, the legacy that is now over 90 years old, a legacy we do not want to depend upon, but a legacy we want to continue building upon. It's also a legacy that we did not build by ourselves, but together with a very strong and worldwide network of Caterpillar dealers. And together with those dealers, we now support in the field over 1.4 million of active CI machines in the field, supporting those machines but also supporting the customers that own those machines, and not only existing customers, but also more than 100,000 new customers that we started doing business with since 2014, many of which bought some of our smaller BCP product as the first machine they owned from Caterpillar.

And in terms of products, we now have over 300 different models in our lineup for CI, and we build a machine right about every 5 minutes throughout the year.

But as you'll hear throughout the morning and in our strategy, we're increasingly focusing beyond the product to grow our services business. And a financing example I showed here is just 1 example but Rob Charter later on this morning will line out more in detail our overall services growth strategy for Caterpillar.

So to start with, if we look at the markets that we serve and the opportunities ahead, we believe that we are in industries with good long-term growth potential. Because if you consider mega trends like the world population that is set to continue to grow and an increasing degree of urbanization, we believe that all of those will point to an increasing need of global infrastructure over time, which, in turn, will drive growth in many of the industries that we serve.

Key point here, however, is that that industry growth will not be uniform across the world. Because if we look at 2017, for those industries in which we operate as CI, we estimate that on a global basis, that industry growth this year will be 15%. But that industry growth will be made up of about 10% industry growth in developed markets versus 25% industry growth in developing markets, with most likely the strongest growth coming from China, where for the full year, growth will most likely be a little more than 50%.

And other key element we need to take into account as we build our strategy is that the increased market volatility that we have seen over the last few years is more than likely here to stay with us, which is also why, as we get into the details of our strategy, you will hear us talk about not just building a competitive cost structure, but a competitive and flexible cost structure to make sure we perform well throughout the cycle despite that market volatility.

So next, if we then have a look at CI's financial results for 2016. Our sales and revenues were for CI were $15.7 million, which we believe is a recent cyclical low, with the segment margin of 10.5%. On the right, you can see some of our mix information, confirming that road construction, heavy and general construction remained our most important market segments and that in terms of geo mix, we now have slightly more than half of our sales coming from outside of North America, with again, Asia being one of our strong drivers of growth going from 16% of our sales in 2015, up to 24% of our sales in the last 12 months. So that was for '16.

If we next have a look at the evolution of our performance over the last few years, you can see on the left, our sales and how, from '14 through '16, for CI our revenues declined 25%, $5 billion in that 3-year period. Good news then is as you've seen in our latest public financial results, revenues in the last 12 months starting to improve again. On the right, our segment profitability and our segment margin, which shows that from '13 to '14, we've been able to significantly improve our segment margin and then keep it relatively flat from '14 to '16, despite that 25% reduction to revenue. And here as well, good news is that the last 12 months, with just a slight improvement in revenues, some pretty strong pull through in terms of our segment margin.

So how have we done this? It really all comes down to disciplined execution of our O&E model, our operating and execution model, which is how we run our business. And within Caterpillar, CI was one of the early adopters of the O&E model, which starts from, on one hand, analyzing the attractiveness of the markets in which we operate and then, on the other hand, evaluating to what extent we have or can build a competitive advantage in those markets. And then, making sure we do not only do that analysis at an aggregate worldwide level, but making sure we did a granular understanding by product family, by model, by region, by individual territory of our sales, our segment margin and ultimately, our OPACC contribution; OPACC, or operating profit after capital's charge, which gives us an indication of the shareholder value that we create by looking not only at the segment margin, but also at the assets that we employ to generate that margin.

So strategic foundation of the O&E model then is OPACC biased resource allocation meaning that we allocate our resources, including time, talent and money, to those critical few projects that we believe over time will provide us with the best opportunity for long-term OPACC growth. And as we then get into that detailed understanding of our markets and executing fixed and growth strategies, the goal is to maximize our margin improvement through that OPACC biased resource allocation.

At the same time, as you've seen over the past few years, we've taken some significant structural cost reductions, again, to build that competitive and flexible cost structure back to the market volatility, and as ultimately we look at OPACC, we've also worked pretty hard on capital efficiency through restructuring our manufacturing footprint and then utilizing lean to synchronize our value chain and improving inventory turns. So that's the theory.

How have we done in practice with our results? If we start from 2013 as a basis and take that as 100 and look at the period from '13 to '16, we know that in that period, our revenues declined by 21%, but by disciplined execution of the O&E model, through that period, we've been able to increase our segment margin by 50% and ultimately, improve our OPACC contribution for CI five fold in that period, despite that revenue reduction.

Full benefits of the O&E model then start showing up in the last 12 months, where, with just a slight improvement in revenues, still well below the 2013 level, our total OPACC dollar contribution for CI at a global level is now 10x higher than what it was in 2013, just a few years ago.

So in the end, goal of the O&E model is to maximize OPACC, OPACC that we can then reinvest in profitable growth where, once again, we will allocate our resource to those critical few projects that we believe over time will provide us with the best opportunity for long-term profitable growth.

And that profitable growth is also right at the heart and the center of our new corporate strategy that Jim outlined. CI is fully aligned with that new strategy. CI is fully aligned to execute our key OPACC improvement projects along the 3 main levers of our new corporate strategy: Operational excellence, expanded offerings and services.

And so next, I will highlight some of our key projects across CI across each of these 3 levers. So first one, operational excellence. And the key here is that even though we've made significant progress over the last few years, there remains a lot of room for further improvement that we will drive in the years to come. First example, quality. On average, since 2013, we have reduced the average defect rates that our customers see in the field for CI on average by 40% in the field. Good, but more to go.

Second, in terms of lean, and Denise will cover lean in more detail later on this morning, as Denise is taking the lead for lean implementation across Caterpillar, but specific to CI, with the disciplined execution of our O&E model, we have been able to reduce the assets that we employ since 2013 by $3.3 billion, about 1/3 of our total asset base.

So how we have done that? Number one, as I said, by utilizing lean to synchronize our value chain, which means that since 2013, we've improved our inventory turns by 50% for CI. Secondly, by restructuring our manufacturing footprint. You've heard before that we have announced close to 8 million square feet of manufacturing footprint reduction. Key point here though is that while we have made all of those announcements, we're still right in the middle of executing many of these projects, like our Sagami facility in Japan, our Gosselies facility in Europe, the Aurora facility in North America and a number of other smaller component facilities that support our CI business. So still in process of being executed, meaning that the result of that restructuring is not yet fully reflected in our financial results today.

Second lever of our corporate strategy is expanded offerings. And starting point here is our customers and our goal to make sure our customers can make more money utilizing our products and services more than they could with any of our competitors.

And so based on our understanding of our markets, we also see a shift in the way customers use our equipment in a varying range of applications, which is what I'm trying to show on this chart. Top right is what we call the life cycle performance segment, traditional segment in which Caterpillar has been operating, which is the segment where customers have the highest machine utilization, medium to heavy duty applications where customers are looking for the typical productivity and efficiency that you can expect from a Caterpillar machine and where customers are measuring their progress by cost per unit of work produced or, call it, cost per ton.

Then in the middle is what we call the lifecycle value segment: light- to medium-duty applications, lower machine utilization, where our customers are measuring their progress in cost per hour instead of cost per ton in the life cycle performance segment.

And then the bottom left, utility applications: lowest machine utilization, lowest cost of downtime, where initial affordability and cash flow are key for our customers.

So goal of the segmentation being to make sure we help our customers be successful, which means for us to adapt to the market and providing customers with choices across that range of applications. And a good example of that is our range of medium wheel loaders where you can see in the middle, our traditional 950M 5-ton wheel loader, M series being our latest version that we bring to market, with then also within that range the select few models which we call XE versions, XE models being those that contain the latest and most advanced technologies for those customers who are looking for the ultimate in terms of productivity and fuel efficiency. So those 2 models for the life cycle performance segment.

Then in the middle in the life cycle value segment, we're offering a growing range of life cycle value products, GC versions, in this case the 950 GC. And then at the bottom left for utility applications, our range of SEM-branded products. Again, goal being to offer a range of choices for our customers and not just existing customers, but also utilizing these choices to find new customers and to provide us with the opportunity for profitable growth over the long term.

Third lever in our strategy is services. And as I mentioned before, Rob will cover our services growth strategy in more detail later on this morning, but I did already want to highlight on how we're increasingly utilizing technology to create new services to help our customers be more successful.

Some of those examples I've put here on this chart with first example being our integrated payload measurement systems that we offer on wheel loaders that can help a customer owning a quarry improve the efficiency of his quarry site, or semi-autonomous excavators with Cat GRADE that can help customers be more efficient in working with inexperienced operators, or intelligent compaction systems, which will clearly help customers with paving jobs sites complete their jobs more quickly and efficiently. Or on the right, Cat Detect and Cat Command, new technologies that will help our customers increase safety on their job sites.

So in summary,. Number one, CI sales over the past few years have been in the range of $16 billion to $21 billion. But we believe that if you look at history, that our sales of $21 billion, which we achieved in 2014 with a segment margin of 10%, is a good base against which we can compare our future expected performance.

Second, CI is committed to continue driving improvements in our business using the O&E model and, at the same time, building that competitive and flexible cost structure.

And number three, looking forward for a sales level at that similar $21 billion level, we are focused on delivering an incremental 5 to 7 percentage points of segment margin for Construction Industries.

So in closing, we are optimistic, confident and committed: optimistic about the industries that we serve and their long-term growth potential; confident in our new corporate strategy and our global team; and committed to deliver results, committed to continue improving our business by driving the O&E model.

Thank you. And with that, I would like to introduce Denise Johnson, our Group President for Resource Industries.

Denise Johnson - *Caterpillar Inc. - Group President of Resource Industries*

Okay, good morning, everyone. Again, I'm Denise Johnson, Group President for Resource Industries and I'm delighted to be here today with you to share with you some information on Resource Industries. I've had the opportunity to meet many of you over the past year. We've made a lot of changes, a lot of improvements. And so I'm excited to show you where we've been and where we're headed in the future.

As a reminder, Resource Industries has 3 machine businesses that serve our mining customers. We have a surface mining and technology division, which largely serves the ultra class or the largest mining customers that we have in the industry. We also have a material handling segment, that is largely support equipment that serves mining, but also serves large construction, quarry and aggregates. In addition to that, we have an underground mining business, and that particular business focus is on both hard and soft rock underground mining.

In addition to that, the Resource Industries' portfolio also serves the entire enterprise with things like the enterprise technology strategy. We have responsibility for enterprise components and enterprise supply network division as well.

So let's take a look at some facts about Resource Industries. Resource Industries returned to profitability in the first quarter of 2017 and as of the second quarter of 2017, we delivered almost $300 million of profit. We have roughly 80,000 machines in the population around the world and 26 locations for component and machine manufacturing. Many of our machines, and we have over 86 machine models, perform in the most remote and rugged operations, working 24 hours a day, 7 days a week.

In Australia, temperatures can reach over 120 degrees Fahrenheit and they can drop to below 40 -- minus 40 in places like the Oil Sands in Canada. From an elevation perspective, they have to operate at 4,500 meters in Chile and Peru, to operating almost a mile underground in some locations. And so very rugged and rigorous operations.

We're very proud of the fact that we've invested in technology even in a time of extreme decline. We have the largest autonomous fleet. You had an opportunity to see that autonomous technology last evening in the largest -- in some of the largest mines throughout the world, and we've safely moved over 500 million tons of materials.

So let's take a look at current snapshot of performance. If you look at the business overview in 2016, after 4 years of market decline, Resource Industries' sales and revenue of $6 billion. From a segment margin perspective, we bottomed out at minus -- a profit of minus 17%, and excluding the impairment charge, that was minus 8%. We've been working very hard to align our cost structures with the realities of the market, right size for the future and, at the same time, invest in the right technologies that are key to grow for the future.

You can see the chart on the left, from 2012 through 2016, our industry mix. Sales and revenue largely in mining, 70% of our sales in revenue were in mining, but we also served large quarry and aggregates, heavy construction and also general construction, and we had some sales in segments like industrial and waste.

By region, our sales are fairly geographically dispersed, although you do see a higher concentration over this period of time in North America and in Asia-Pacific.

As we look forward, we do see a long-term strategic fit for Caterpillar in the mining business. As Bob mentioned earlier, the world is dramatically growing and going more urban. As that world population grows, as urbanization continues and as global infrastructure requirement continues to grow, it's a good thing for mining as household goods, energy consumption, roads, they're more dependent upon minerals to allow that growth to take place. So as we look at the economics of mining for the future, and the key and core areas where our mining -- the mining companies that we serve are operating in areas like coal, where we do see, especially in emerging markets, continued growth of 2% to 3% over the next decade. In addition to iron ore, copper and gold, all of the indicators would indicate continued growth for the future. So we see that as we support those customers and as we support that industry, we have a good strategic fit as a company and aligning with that.

We also have a number of indicators that we look at and we talk about these quite a bit, as, for the last 4 years and asked quite often, what are the signs that you look at as key indicators as a segment, or whether mining is going to turn around, where you are in the cycle? One of the things we obviously track very closely is commodity prices. And commodity prices have come off from their bottoms and mining companies are making money. At even a sustained low level, they have become more productive and at current pricing are continuing to come out of very, very depressing times and are making money and are continuing to invest.

And we look heavily as their forecast for investment. So miner CapEx and looking at the sustaining CapEx, which is where the investment is made for machines and equipment in mind, we look at the forecast up through 2020 and beyond, and we see a steady increase in mining CapEx over time.

We also track a number of internal indicators. We look at the number of parked Caterpillar trucks and fleets around the world. And we have seen that continue to drop on a monthly basis. So trucks are being put back to work and miners are continuing to utilize their assets to a large degree. And before they're going to go back and repurchase a new truck or a new piece of equipment, a new dozer, they're going to put their assets back to work and they're going to ensure that they're leveraging those to a large degree.

So as a result, we've seen truck utilization and mine production increase over the last year. And as we talk to mining companies, we see those trends continuing, again, optimizing, productivity, enhancing existing assets they get, but also replacement demand will come on and we're starting to hear a lot about that.

So let's talk a little bit about Resource Industries over the last few years, because we have gone through a pretty intensive and extensive cycle. Resource Industries topped sales in 2012 at $20.4 billion. In 2016, we were just below $6 billion, as I shared with you earlier. That's a 70% reduction on our top line over a 5-year period. 2016 was a historical low and the past 12 months, if you exclude the impairment, we would be about breakeven. However, we have returned to profitability in 2017, and we're ahead of our plans moving forward and we've put a lot of work over the last 4 years into steadying ourselves up for the future and ensuring that we were doing everything possible to align our segment with the actual industry and where it was headed.

So I'd like to focus on exactly how we've done that and where we're headed for the future. One of the things that we've done in Resource Industries, and we have started this a couple of years ago, is to align to the O&E model. And although we're not as mature in our implementation as Construction Industries is, we do have a number of initiatives that have been underway for quite some time and a number of initiatives that are pulling through for the future.

So you see that we've aligned under operational excellence, expanded offerings and services and I'm going to talk with you about a few examples of where we've aligned to that and how we're set up for the future using the O&E model. So to begin, we have spent quite a bit of time in the area of restructuring, and we talk a lot about restructuring as a company, a lot of that restructuring has taken place within Resource Industries. We have lowered our breakeven every year since 2012, and we're continuing. This shows results through 2016. Our restructuring efforts will continue beyond 2016. We have completed the closure and restructuring of over 25 mining facilities, and we have exited 3 product lines, leveraging the O&E model to analyze whether it made sense to stay in those businesses and continue invest in them for the future, or whether it made sense to exit and we chose to exit.

We have also streamlined and consolidated a lot of our components and products development manufacturing facilities in order to really get at what is the point at which you make and buy components and make sure that we are leveraging key technologies, protecting those assets and those technologies where it makes sense and, in other cases, going to buy where it doesn't. And as a result of that, we've had a flexible cost structure that ensures that for the future, we can maintain our profitability.

So a lot of work has been done, and we ask ourselves as we start to see a turn, we want to make sure we remain focused and don't allow the upturn to allow us to have costs creep back in. And one of the ways that we're really focused around doing that is the implementation of operational excellence around lean. So Bob alluded to the fact that the lean organization, which is part of our global supply network, has moved into Resource Industries. And we chose to do that really as a result of the devolvement and reorganizing, how we're operationalizing improvement within the company. The team that's at the center that sits within Resource Industries is really a center of excellence. The implementation of lean itself is the responsibility of the business units and of the segments directly. So they own the ownership, they own the implementation. However, the coordination to ensure synergies, to ensure that we're monitoring, capturing best practices, applying those, that we have a place for teaching and implementation is being done with a very small lean team, an agile team at the center so that that implementation can be more effective.

And if you look at how we've implemented lean, we actually have a deep history of what we call the Caterpillar production system. A lot of Six Sigma background within Caterpillar over time. That, in combination from a manufacturing perspective, with looking at the engineered value chain much more broadly, focusing on what the customer requirements are for availability and working back; finding where we can reduce waste where it's optimal, the whole inventory within the value chain; and ensuring that we're synchronizing that value chain so that we can meet customer requirements and the demands of our customer, but optimizing, obviously, the value chain along the way, because the last place you want hold all of your inventory is in finished goods, especially if the finished goods that you're holding is not what the customer is asking for. So engineering the value chain, how we design our products to support that becomes very important.

We also are finding that this reaches beyond manufacturing. I talked about engineering the products themselves, but the lean efforts that we have are extending beyond manufacturing and those facilities and moving into product development, moving into even such processes as human resources. So how we're offering a lean culture across Caterpillar becomes part of the way that we do business.

So let's shift gears out of operational excellence and talk about how we're expanding our offerings for our customers. Like Construction Industries, Resource Industries' customers are pulling for different solutions, which are based on application and their site infrastructure. Caterpillar has a solid heritage and legacy in mining trucks with a strong focus on safety, reliability and durability. One of the things that we've found, however, is that many of our customers have specific application and infrastructure demands, which require a different solution. And so what we are providing is both mechanical and electrical drive offerings, which are optimized based on size class of our trucks and offering both solutions for customers as we move forward.

We really believe that the deep, vertical integration of our drive technology remains an important core to what we do. These are not purchased components, we are manufacturing those and we are deeply integrating those into our products. We see this as a competitive advantage and one that we will sustain for the future. As a result, we believe we have the broadest and most differentiated offerings in the marketplace, especially around drive technologies.

And as we expand and think about how to leverage that deep expertise in drive technology, machine electrification is clearly something that we hear more and more from our customers that they are pulling for. And so as a result, we've looked at our portfolio and where we had gaps as with large mining trucks in the 320-ton class, we've introduced new models like the 794s. We've leveraged the technology across the enterprise so that we can work faster from an R&D perspective to implement that technology into other product lines. So you see here the 988 electric drive. We offer electric drive as an option. We also offer a mechanical drive. So depending upon what the customer needs are, we have that option available for them.

We're also leveraging the building blocks of the technology to expand faster, so it allows us to do R&D at a very faster pace and at a lower cost. So the example here on the underground load-haul-dump vehicle, we actually leverage the technology from the D6, which is a medium tractor platform in Construction Industries, we brought it into the mining platform and implemented that. We use the same traction motor and generator for this underground LHD. So it's able to use building blocks of technology and spread it across to expand the technology and ensure that you're able to get some scale volume as well as a technology advantage.

While we're able to reuse the actual components, the vertical integration is what we think really gives us the competitive advantage. So in addition to focusing on having the best products in the marketplace, we're also focused on services, because we recognize for a mining company, 24/7 running of equipment requires a lot of expensive service. And so as you look at services, one of the biggest services that really has expanded and exploded in full is the service around autonomy. We currently have the largest autonomous fleet in the world with over 500 million tons safely hauled. And I want to say that autonomy is no longer an experiment. For a long time, we were doing a lot of development. And autonomy is not a new concept; we've been working autonomy for number of years. But we're introducing it now in a time where it is actually in production. We have a number of mine sites where we're operating autonomously, and we have an extensive pull from new customers that would like to introduce that technology as well. And as you see here, autonomous solutions is not just for trucks. We've expanded this autonomous solution for drills, large tractors and even in the underground space, for loaders as well as our longwall systems. And we're seeing an increasing pull from customers. We currently are tracking over 100 active opportunities. One of the key things that we think is important for this technology is that we have to be able to not only leverage autonomy for CAT products, but also for non-CAT products to work within our ecosystem.

We're also finding that while some customers are interested in applying autonomy, we also recognize that some of them aren't looking for a full-scale solution. They're looking for a lighter option. And so we're working on a way to develop a lighter version for our autonomy solution that can be leveraged for large constructions or smaller mine sites. And we are working very hard to move fast in this space. We recognize there's a lot of competition and this is competition that's traditional and also nontraditional. And so we need to move fast, we need to continue to invest and stay ahead of the curve so that we stay ahead of the competition.

So in addition to autonomy as a service, we also are being asked to look at mine sites differently than we have ever before. So again, autonomy is a site solution: you're providing products, but you're also providing a solution for a site which allows productivity and safety to be achieved. And the reason customers are pulling on services like autonomy is that we're seeing up to 20% to 30% productivity improvements and we're seeing, obviously, higher levels of safety. And so the total cost of ownership is reduced considerably and the productivity is enhanced extensively.

But a lot of customers are asking, how should this technology be leveraged and how can we help build that ecosystem for the future. So one of the things we're focused on is providing site solutions. You see here an example of mine site in Peru, where we have been asked to come into their site 1 year before the formal equipment tender release to help with designing the site. What would be the optimal equipment? What would be the optimal technology? How should the mine site itself with its toll road and width be designed? This is something we never had the opportunity to do before and are starting to see much more of a pull because we can leverage not only our domain expertise for equipment, but also technology to help really produce a site that's more productive, but safer than ever before. And we're very excited about that because that brings us closer to our customers. And we've demonstrated where we've come in to work on a site that we have more than 20% improvement in equipment costs per ton.

So as I mentioned earlier, with an installed base of more than 80,000 machines that run 24/7 in some of the most severe climates, we also need to make sure that our equipment can stay up and running as long as possible, and so the aftermarket and being able to leverage the aftermarket becomes very important.

So as we look at the aftermarket, while Resource Industries has a healthy aftermarket presence today, we want to continue to expand it and grow it even more. And as we've listened to customers and what they're looking for in the space of aftermarket, because they have a large installed base and a long life, they're really looking for continued improvement in performance and how we're leveraging that is through the use of upgrades.

So an upgrade kit to allow performance to be at the next level, where, in the past, mines and customers would wait and purchase the next generation and the next evolution of products moving forward, they're actually looking for existing equipment to be upgraded to a higher performance level, and so we're doing that through increased retrofit offerings.

One example, that's very relevant recently is we had a customer in California, who, from a Tier 4 perspective, is hitting the emissions deadline at the beginning of 2018. And in California, they no longer will allow non-emissions compliant machines to be operating in construction sites in that state. And so they came to us to say, "Hey, we have an installed base of a large number of wheel tractor scrapers. We'd really like for those wheel tractor scrapers to be retrofitted, so that we can compliant and still leverage the machine and not move them to another state where they could be leveraged." And so we've come up with a Tier 4 compliant solution for a retrofit and we're upgrading that equipment so that they can leverage that. So those are the kind of examples where we're listening to customers, providing solutions now more than ever before moving forward.

In addition to that, we recognize that a lot of our customers are looking for more support on site, and so making sure that we do have site solutions, that we're partnering with our dealers to provide customer support agreements and that we have a plan as we look at maintenance windows and rebuild a plan for every serial number that's on a mine site.

We obviously have a lot of focus on the aftermarket and clearly, from a services perspective, we see this as an opportunity to continue to partner with our customers and grow overall.

So I talked about our plans for operational excellence, expanded offerings and services and I'm sure many of you want to know what does that mean to Resource Industries from a bottom line perspective. So as you look at all of the initiatives that we currently have worked and are continuing to work, and you look at where we peaked for sales volume in 2012 and where we were in 2016, what we would consider to be, based on demonstrated performance, a normalized view of Resource Industries would be in the $10 billion to $12 billion range. We achieved that in about the 2012 -- I'm sorry, 2013, 2014 time frame. And at that time, on average our segment margin was 10%. With all the initiatives that we have in place and those that we are implementing currently, we see that margin growth of about 2% to 6% on top of that normalized segment margin of 10%.

We're confident in the strategy that we have. We know that we're positioned for long-term growth. We have initiatives that we're continuing to invest in. And we really see the opportunity to continue to operationalize the O&E model to allow us to really take our performance to the next level and be segment leading as far as financial performance.

So to sum things up, Resource Industries is focused on the customer now more than ever before. We're partnering with our dealers. We're partnering with our customers at the site. We're accelerating our focus on services, expanded offerings and technology. We recognize that we have an opportunity in this window of an upturn to not only maintain the relationships but to actually grow them, and to establish a new way of looking at Resource Industries as a partner for the mine sites and large construction sites than ever before. We're committed to achieving segment-leading performance and serving our customers better than ever before.

So thank you very much for your attention. We are now going to take a 30-minute break, so please plan to be back in 30 minutes. Thank you.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Welcome back. I hope you enjoyed the break. I saw most of you take good advantage of it. Just a quick reminder on the rest of the agenda for today. We're going to start with Tom Pellette to give us an Uptake on Energy & Transportation; and then Rob Charter will come up to talk about the customer and dealer support group; and then we'll finish up with our prepared presentation with Brad Halverson on the financial review. And we'll take another short break so we can set up the stage and we'll come back for 45 minutes of Q&A.

So with that, I'd like to introduce Tom Pellette, Group President of Energy & Transportation.

Tom Pellette - *Caterpillar Inc. - Group President of Energy & Transportation*

Thank you, Amy. Good morning, everyone. So it's a great pleasure for me to present the Energy & Transportation segment to you this morning. I will celebrate 24 years with Caterpillar next week, and I've spent the lion's share of my career on the energy side. I did spend a couple of years in the Construction Industries segment that Bob leads today. But when Jim became CEO in January, it was great for me to rejoin and Energy & Transportation.

So the Energy & Transportation segment is a diverse group of businesses that serve a wide variety of industries. Starting from your left with transportation, this includes our rail and marine businesses. Oil and gas includes reciprocating engines, transmissions, well service pumps, gas turbines and compressors used in the exploration, production and transmission of oil and gas. Power generation includes engines and gas turbines to provide prime and standby power. And we also provide engines to a wide variety of external industrial customers using our products and applications such as electric power, material handling, agriculture and construction. And finally, providing cost-effective, high-quality engines for CAT machines remains one of our highest priorities.

So we have multiple channels to market and multiple strong brands with a history of strong customer relationships. While CAT is celebrating 92 years this year, EMD is celebrating 95 years, Solar is celebrating 90 years. Perkins is celebrating 85 years. In fact, I was in Peterborough last week celebrating that with them. And last year, FG Wilson celebrated 50 years. And believe it or not, MWM is closing in on 150 years.

So we produce a broad range of reciprocating engines under 4 brands: CAT, Perkins, MWM and MaK. The sizes range from a 0.5 liter, all the way to the largest MaK engine at 2,000 liters, with power offerings from 8 kilowatts to 18 megawatts, which, in the U.S., translates to 10 horsepower to 24,000 horsepower. The smallest engine platforms are used in lawnmowers and light towers, while the largest are used in ocean-going cargo vessels. We burn various fuels, from diesel to natural gas to a variety of alternative fuels and we also offer dual- fuel solutions.

We also apply recip engines to a suite of solutions for different applications and markets. For example, we provide gensets for electric power and also provide our engines into oil or gas and marine segments. As you can see on the map denoted in gray, we have a worldwide manufacturing footprint in every tri-sphere. Our word class dealer network and direct distribution channels give us a competitive advantage, and Rob will cover our dealer network in his presentation.

Caterpillar acquired Solar in 1981 from International Harvester. Solar's the global leader for industrial gas turbines up to 30,000 horsepower and, as I mentioned, is celebrating its 90th anniversary this year. Our turbines drive compressors, pumps and generators for use in power generation and oil and gas.

Besides offering mechanical drive gas turbines with other OEM compressors, Solar also manufactures compressors to match each of our turbines, delivering added value to our customers. While its manufacturing footprint is predominantly in the U.S., Solar's end-to-end businesses services customers directly from numerous locations worldwide and I'll give you a few more details on Solar's service business later.

Solar began applying its gas turbines and compressors into the oil and gas and power generation markets more than 50 years ago and has developed brand recognition and deep customer relationships which allows them to successfully compete in those markets.

Caterpillar has also served the rail industry since our acquisition of Progress Rail in 2006. With the addition of Electro-Motive Diesel in 2010, Caterpillar offers a broad range of rail products and services from freight and transit locomotives, to freight car, signal and infrastructure services. We are involved in virtually all aspects of the rail industry with the exception of manufacturing of new railcars. With approximately 30,000 EMB locomotives, there's a big opportunity for aftermarket support. I'll talk more about that when I discuss services. And similar to Solar, Progress Rail [sells in] services to its customers directly.

Energy & Transportation has a long history of success. Since 1925, we've built over 20 million engines and have installed 750,000 gensets. Through our remanufacturing and repair processes, we have recycled over 6 million tons of scrap metal since 2010, just 1 example of how we're integrating sustainability into our core business. And I'll touch on our Reman business a little bit later in the presentation as well.

We're a global company and always have an engine plant in operation 24/7, 365, producing an engine every 2 minutes.

Looking back at some key metrics in performance of our business, in 2016, we delivered $17 billion of sales from the E&T portfolio. Those sales included $2.5 billion of inter-segment sales for CAT machines, which is a key business for E&T. We achieved over $2.2 billion of segment profit, or about a margin of 13%. This was a strong performance given a 20% year-on-year sales decline we saw versus 2015. Within our segment, we also break down the industry and geographic distribution of sales to external customers which is shown here with a multi-year average. Sales into our 4 industries, oil and gas, power generation, transportation and industrial, are roughly split by quarters, and this has been fairly consistent over time. Geographically, we're fairly balanced between North America and the rest of the world.

So if we look back at our results since 2013, it's been a tough couple of years after we had a record 2014. Oil prices then went from over $100 a barrel down into the $40 to $50 range, even dropping into the $30 a barrel range. When the price of oil dropped and coal usage decreased, we saw industry lows in transportation and oil and gas, with carryover effects on our power generation and industrial business. Our overall sales declined 34% in 2 years to our low in 2016.

The team did a great job flexing our cost structure while continuing to invest in the future. We're now seeing signs of a small recovery over the past 12 months, but the recovery is fragile. The improvement is largely driven by onshore North American oil and gas and inter-segment sales activity. The rest of our industries are mostly flat.

Growing energy demand is a strong driver of the Energy & Transportation businesses, and you heard this theme in the previous segment presentations by Bob and Denise. Increasing world population, urbanization and a growing middle class drive an increase in world energy demand. The world population has increased from 6.1 billion in the year 2000 to over 7.5 billion today. Approximately 15% of that population is still without electricity and by 2040, there will be 2 billion more people wanting access to power. In fact, since 2000, the global consumption of oil, natural gas and coal has witnessed a compound annual growth rate between 1% and 3%. While coal usage has seen a slight decline over the past couple of years, the use of oil and natural gas has continued to decline. Fossil fuels are not growing at the same rates as renewables, but there will still be a 20% absolute value fossil fuel energy increase by 2040. More people, more power needed, fossil fuels are not going away. The world will need an all-of-the-above energy strategy to meet the needs of the growing population for 2040.

Exploration and production CapEx is a strong driver for several of our segments. 2017 has been a turning point for onshore expenditures and IHS is projecting an increase in onshore spending for the next couple of years. The increase is heavily focused in North America in the near term and is flat for '17 outside of North America. It's the result of the North American oil and gas industry continuing to find ways to make a profit through improved efficiencies in their processes. While this is good news for parts of our business, the offshore CapEx is projected to decline in '17 and remain relatively flat for the next couple of years. This impacts our marine offshore vessel engine sales.

So this is a summary of our E&T strategy for profitable growth. You'll recognize the gear. We're very aligned with our corporate strategy. We have a focused agenda aligned with the 3 corporate strategic levers to drive success: operational excellence; expanded offerings; and services. And I'd like to spend a couple of minutes covering some key opportunities for Energy & Transportation under these 3 key levers. I'll cover our efforts around developing a competitive and flexible cost structure; how we're expanding our offerings to investments in the product range, power density and integrated solutions; and finally, how we're focused on continued improvement in our service business to make our customers more successful.

Denise has covered our enterprise efforts in lean very well. E&T is supporting this through reducing our manufacturing footprint and our assets as well as significantly reducing material and period costs. Like other segments within Caterpillar, E&T has reduced its footprint by closing 10 facilities, or about 13% of our manufacturing space. We have reduced our assets by more than $1 billion and have realized significant period and variable cost reductions. These actions have also improved our competitive and flexible cost structure and preserved our ability to invest in the future.

Under expanded offerings, I'd like to talk about significant investments we made to fill a product gap and improve power density. Our industrial power systems division has engineered a remarkable turnaround and expanded our growth opportunities. We have made significant investment in 2 new centerline engines. The compact 2.8 liter and 3.6 liter. These engines will see broad applications not only in Bob's Construction segment, but also via sales to our numerous customers through our Perkins distribution channel. In addition, we have upgraded the 9-liter engine, improving our power density for machine and commercial customers. These programs not only fill portfolio gaps, they reduce product costs, while allowing for emissions compliance.

Also under expanded offerings, the key differentiator in power generation is power density. Increasing the power density of the products help us ensure we have a lower installed cost as well as having a product that is lighter weight, easier to handle and maintains a smaller footprint than competitive offerings. Two of the key products we have focused on are our 3500 and C32 engines. We have improved the power density of our 3516E by approximately 20%, improving the competitiveness of a product that has delivered market share and profitability to Caterpillar for more than 35 years. Our ability to upgrade the C32 to fulfill the 1500 kVA power node, which was previously filled by the 3512 engine, dramatically increases our market competitiveness and improves margins.

E&T also expands its offerings by providing a suite of solutions for different applications in markets that we serve. One example that is shown on this slide is our well servicing solution. Jim mentioned this in his opening remarks. In this sector, we can provide up to 50% of the content value of a well services trailer. Our offerings at a well site include the 3500 engine, transmission, well stimulation pump, the high-pressure flow iron that runs from the trailer to the well and that's from our recent Kemper acquisition as well as a CAT genset at site. We're increasing customer value with products, integrated solutions and services.

Another example of our integrated solutions is for marine vessels. Strategic acquisitions, even during down years, have positioned us well to offer full solutions. In addition to the main engine, the marine propulsion solutions can provide controls, thrusters, auxiliary gensets, energy storage, transformers and even a hybrid drive. We also have propulsion solutions from the acquisition of Berg including thrusters, controllable pitch propellers and pods. These integrated solutions allow us to add more value to our customers through improved fuel efficiency, lower maintenance costs, less unplanned downtime and lower overall cost of ownership. And of course, providing an integrated solution improves our competitiveness.

Another example of expanded offerings include significant investment in new products. Great example of that, our F125 high-speed passenger locomotive. This is the first new EPA Tier 4 passenger locomotive to be sold in the world. Powered by a Cat C175 engine, our new F125 passenger locomotive is fast, clean and efficient. The F125 is running in trials in California as we -- as you sit here today.

Under services, I'd like to talk about digital solutions. Across our industries, we have multiple offerings to enable customer-centric services. From simple to comprehensive, E&T offers many different connectivity options to our customers. On the left-hand side, our SmartCap solution is focused on providing hours, location and service integral information for less than $50. This information is transmitted from the low-cost oil cap via the owner's cell phone via Bluetooth technology back to our servers. The Cat Connect go-to-market brand covers a wide swath of our industries from electric power to oil and gas. Cat Connect provides remote monitoring and reporting of assets for both CAT and competitors' equipment. Last year, we acquired PEPR and M2M, and it strengthened our strategy by vastly expanded the number of connected assets that we have and improving our optimization of the compressor assets.

Finally, on the right-hand side, we offer fully integrated systems like Solar InSight, Progress Rail's, PR Uptime and Marine Asset Intelligence. These highly capable offerings allow predictive analytics of our equipment to reduce the cost of ownership and avoid unplanned downtime.

Now speaking of Solar, a critical success factor in oil and gas and power generation is intense service focus. Our Solar turbines business has 65 service locations around the world and turbine overhaul operations in 6 countries. This footprint allows Solar to provide 24/7 field service support along with a suite of service offerings throughout the entire life cycle of the equipment, which can run as long as 40 years. Service offerings include technical support, service parts, technical training, turbine overhaul, compressor restage, equipment retrofit and upgrade and all the way to an entire package refurbishment for another life cycle. For customers in critical applications, Solar offers equipment health management, which includes resident technical expertise along with deployment of its InSight digital platform. We continue to invest in Solar's InSight branded digital solutions which delivers quantifiable value to the customers in the areas of reliability, availability, planning, performance improvements, longer operating life and prevention of failures. We routinely see reliability figures in the high 90s.

The rail division is a complete rail industry solutions provider. As mentioned, there are 30,000 EMD locomotives worldwide, and Progress Rail has a footprint in place to provide locomotive overhauls, repowers and modifications. In addition to locomotives, we are a leader in railcar servicing. We sell 200,000 wheelsets, 375,000 bearings, 75,000 axles annually. If it is on a train and moving, Progress Rail can service it, remanufacture it or scrap it. Our rail services go beyond the moving train to the surrounding infrastructure as well. We supply track work and signals to the railroads. We lay the track and we maintain the signaling equipment. Through its PR Uptime product, which I mentioned previously, Progress Rail can monitor the health of its locomotives to predict and prevent unplanned downtime. Unplanned downtime is one of the most debilitating occurrences in the rail sector.

And as a final example of our services, I've mentioned sustainability and I mentioned Reman, we offer remanufacturing options from many of our products. It's a solution to provide lower-cost options to our customers. A large percentage of both our engines and turbines can be remanufactured. And finally, it's a great sustainability story as we help our customers to build a better world.

Through our commitment to operational excellence, expanded offerings and services which I've just gone through, we're focused on delivering improved results in segment margin over the long term. We already have a high-performing portfolio of businesses. Our sales over the past few years have been in the range of $17 billion to $26 billion. We believe if you look back at our history, sales of about $23 billion in the year 2013 when we delivered segment margin of around 15% represent a good base against which we can compare our expected performance. Significant actions have been taken in recent years and we put a lot of focus on maintaining a disciplined cost structure as well as driving improvement through our operating and execution model. In about that similar sales band, we are focused on delivering an incremental 1 to 3 points of segment margin improvement. Our focused agenda: for profitable growth includes actions supporting Caterpillar's strategic levers and the priorities that I've listed under those 3 strategic levers on this slide. We're confident that if we realize that agenda, we will deliver achievement of our performance improvement goals.

And finally to sum it up, E&T is well-positioned for growth. We serve great industries that are both very diverse and attractive. We're the market leader in many of those industries and governed by our operating and execution model, we're investing to provide competitive solutions to make our customers more successful. Thank you.

With that I'd like to hand it over to Rob Charter Group President of Customer & Dealer Support. Rob?

Rob Charter - *Caterpillar Inc. - Group President of Customer & Dealer Support*

Thanks, Tom. Good morning. As Tom said, my name's Rob Charter and I lead the Customer & Dealer Support Group. And our job in the Customer & Dealer Support Group is to work with the product groups like CI, RI and E&T and our dealers to deliver outstanding value to our customers. So we're really excited that the new strategy and the initiatives we've deployed that are really there to support our customers, and those initiatives on service really focus on some of our competitive advantages, those being global scale, full suite of services, leveraging our domain expertise and utilizing digital to find insights that all drive value to our customers.

So let's get started. You've seen this slide before from the other group presidents and so, it's in the similar format that we talk about the strategy and operational excellence, expanded offerings and services. But what we've got listed next to that is what our customers are telling us. What is important to them. And some of the things they're talking about is they want good parts availability with a good value proposition. They want us to be easy to do business with so they can focus on their business and especially in relationship to e-commerce. They need uptime on their product using technology to anticipate needs and repair before failure. And they need consistent service, whether that be local for a smaller customer or globally if they're a multinational customer. They need a full suite of products and services and we'll talk more about that. And they need unique tailored solutions to their individual circumstances. Now, however, regardless if the customer is a large-scale miner or a data center that requires a power solution or a landscape gardener, there are some things that are fundamental needs to all customers. They're asking for lower owning and operating costs. They want increased productivity, and they need not worry about their equipment but focus on their own business. So we need to be easy to do business with going forward.

So I'd like to talk about all of those elements that we see in the strategy there but before I do that, I'd like to go back over where we've come from over the last 7 years. So in 2010, we kicked off a focus on driving industry expertise and I think it was really clear from Bob and Denise and Tom that we really focused our organization around industry expertise, and we've been working with our dealers to do that as well. And in 2014, we kicked off an initiative which I know a lot of you are aware of which was called Across the Table. Now Across the Table was really focused on dealer performance; consistent best practices in 10 specific work areas. And many of you have asked in the last few years that I've been in this position about how have we been successful in that and how has that gone. And I would say that we've had some great successes in Across the Table. And particularly the one that is most important to me is the management of customer loyalty and that has improved over that period.

But today, in 2017, we're talking about how do we build on those foundational capabilities from 2010 and 2014 into the new enterprise strategy and improve our customer service capabilities. But before we start that, I'd like to talk about our competitive advantage. Many of you know about our Caterpillar dealer network, but I'd like to level set because it's very important to us. Our dealer network is one of our key competitive advantages in the marketplace. We have 172 dealers over 2,100 branches and over 150,000 employees who interact with our customers everyday. This a significant asset for us to leverage. Dealers are and will continue to be the way we go to market for Caterpillar products. And they've been with us since 1925. In fact, some of our dealers are actually older than that as they were distributors for our forefathers before that. And we have multi-generation ownership in those dealerships. We are really investing in the capabilities to further strengthen our dealer network as we go forward.

So I'd like to, again, show you how our dealers serve our customers on a daily basis. They offer first and foremost a full product line across the industries. But they do more than just sell machines and engines. I think Denise's example on job site studies where we got engaged a year early before the job site or the mine site was open and we could deliver a 20% improvement through better design, fleet matching and autonomy and all those things was a really good example about how we help our customers more than just selling product. We do things like extended protection plans, product studies and matching, safety services and many more things. Our dealers partner with our customers everyday in this area.

We also offer things like Cat Finance, but it's not just a financing arm, Cat Finance is there as a path into our customers through multiple cycles. So they redefine their payment plans, the way they work with a customer depending on their up-cycle, down-cycle, what the customer's needs are and they're really there focused on our industries and our products to help our customers.

I would be remiss if I didn't talk about rental. Rental is becoming a bigger component of our dealer offerings globally and particularly, in developed markets. And our dealers are continuing to focus on operational excellence, adding more products to their rental fleets. I think Bob talked a little bit earlier about us designing products that better suit the rental industry. So they're building that out. And they also build out their allied products as well so they're a one-stop shop for our customers and they're also building out locations as we speak to make sure that the service the customer in the best locations possible. So they do all those things in terms of advice, partnering with the customer, finance through Cat Finance, rental services, but the thing they're really best known for is there in-field support. And this is the heart of what a dealer does everyday and what a customer depends on.

I mentioned the number of employees at dealers worldwide was about 150,000 employees. Almost 77,000 of those are focused on in-field support. So you'll see 3 good examples on the presentation there. The first one on your left is a great example. It's a remote mine site in Australia, in this case, where the dealer's there with a workshop, maintaining the equipment, making sure it's ready for the go line and optimizing uptime for the customer. Denise talked about on-site support a lot in her presentation.

The second one is more unique. This is Energy & Transportation. This is actually a marine technician in a vessel at any port, wherever that marine vessel decides to harbor, servicing the equipment. And for this case, that customer expects a consistent service wherever they go and they're very, very mobile, obviously.

And the last one is actually a service vehicle driving out do a dairy farm to service a skid steer loader. All very different examples of in-field support that we need to provide for our customers. In-field support drives strong customer loyalty and this is what our dealers are focused about every day.

Our dealers also provide a full suite of rebuild capabilities. The left-hand picture here is what we call our component rebuild center. This one is an example out of Mexico from MATCO, our dealer there. And what this rebuild center's focused about is full drivetrain rebuild capability. Now our product is designed to be fully rebuildable many, many times. And usually, it's about 30% cheaper to rebuild a product or a component than it is to replace. So our dealers are very focused in these facilities to ensure that they can certify a powertrain, whether it be engine, transmission, or final drives and differential, or a hydraulic system for the customer's needs. They can also offer Reman products. As Tom mentioned before, we have Reman offerings as well. So they're really focused on how do we lower the customer's owning and operating cost. But through this rebuild process or Reman, how do we drive sustainability which is a key focus of a lot of our customers.

I'd like just to transition a little bit about parts and parts availability. If you do any survey with our customers and it doesn't matter which industry they're in, within the top 3 reasons that they buy Caterpillar equipment is usually parts availability is number one or number two. It's really, really important. If we don't have parts available to our customers, they suffer. The machine or engine goes down and they can't produce or do their work. We have 21 distribution centers in Caterpillar worldwide that are shown on the map and the dealers have 2,163 dealer branches or mini distribution centers as well. This is a huge differentiator for Caterpillar.

But it's not just about physical locations, it's about how you optimize them and Denise certainly talked about lean and so did Bob and Tom, about how we use lean and engineered value chain to make sure that we have the right part in the right place at the right time with the right service to make our customers satisfied. So we're doing a lot of work in my organization on how do we apply those lean principles to optimize our parts inventory around the world.

We're also using things like data analytics to anticipate when that part's required. We have a study going on at the mine site through Denise's organization where we take the top 400 critical parts of the large mining truck, and we work through analytics to predict when those parts will be consumed, making sure we put them at the closest branch or service bay for that customer as they go forward. We look at -- Denise was talking about a plan for every serial number in her presentation. We look at every product we have. We look at the expected consumption and by having those assets connected, we look at what is being consumed, how many hours of operating and then predict when they will need support going forward. So we're doing a lot of work there.

The other thing we're doing is focusing on parts life cycle management. If you think about parts in a machine, they have different stages in their lives. A machine or an engine will sit there and if it's new and it's highly productive, it has a different requirement in serviceability to something that is used less frequent or is coming to the end of its life. The service level that you need to work to, whether it's a piece part or a major component, also changes, so we're working our logistics network to make sure that we are servicing at the right level at the right time in the product's life.

And last, but not least, 3D printing. This technology is really advancing at a rapid rate. We actually print 3D parts today both in production and in aftermarket, but on a fairly small scale. But we're working very closely with some leading suppliers around the globe on how we use 3D printing in the future, because it provides lots of advantages for our customers. It shortens the lead time, it means you can have a part anywhere in the world as you need it and it really does change the way you distribute parts and support your customer. It can actually lower inventory for the organization but improve availability for our customers at the same time. So it's all about -- this whole focus on our parts inventory is about balancing availability and optimizing the inventory we have.

And this is all driven, as Jim started the presentations today, on our operating execution model. And focusing on our efficiency and availability at the same time and I know Brad's going to talk a little bit more about that following my presentation.

So change the subject again. Easy to do business with, what does it mean for a customer for us to be easy to do business with? E-commerce is a really good example and I'll give you 3 different scenarios where this is important but is different. If you think about a large multinational customer, they have a different requirement. What they are looking for is us to be able to integrate into their enterprise resource planning system or their ERP system so that they can actually put demand on us in their own system and we draw that and supply that to them. Usually, it's bulk orders, it's heavily engineered, it's usually a supply chain management-type relationship and so, we're building out our capability with our key customers on how we do integrated procurement with them.

The second area is business-to-business system relationship. In this space, this is where a customer has a good established relationship with the dealer. They have an account with that dealership and they're looking for some unique things in their relationship. The dealer may have special pricing for them. They usually like to order again in bulk. They have special parts kitting. There may be other products that they need to supply through their e-commerce channel that complement the Caterpillar offerings as well. So that's a business-to-business and it's very, very seamless.

And last, but not least, an area of great opportunity for us is business to consumer or B2C. Many of these are first-time shoppers. They're not aware of the part number that they're looking for or how to go about their repair. They usually want to order on credit card. They don't have an account with a dealership and so -- and they want it delivered in a unique way, whether it's direct to their site, whether it's pickup at the dealership or something else. And Bob talked about the importance of retail in his presentation. This is all part of that. So we're spending a lot of focus on this new strategy about how do we, in all 3 areas here, improve our performance with our customers and our consistency with our customers through e-commerce.

So let's talk about other ways we're improving on how we service our customers. Jim talked a lot about customer support agreements in the opening. In a customer support agreement, there's lots of ways we can support a customer in the tailored solutions that fit their individual needs. Each customer is unique depending on their industry, the equipment they're using, the age of the equipment, how productive that equipment needs to be, how dependent they are on it, so one size does not fit all.

So I'd like to show you a couple of differences here of different types of services we're providing through our dealers to support our customers. It can start with condition monitoring in the top left-hand corner where we're actually connected to the asset, we're watching what's happening with the asset and we're giving advice on the multiple repair options a customer can have. We've been doing a lot of work in the last couple of years on repair options using our global scale and understanding cause and effect of repairs that dealers have done to make sure that we are very quick and agile in being able to give them multiple options depending on the degree of repair they're looking for, all the way down to a certified rebuild, which is where we actually rebuild an engine or a machine or a drivetrain and we give it a new life and a new warranty and we actually warrant that as a new machine again. We do things like specialized custom track services where we go out to the machine, we'll measure track on a track-type tractor or an excavator in Bob's area or a large mining excavator and then we'll give them advice whether we do a [pin in bush] training and reuse that product or we need to go into a full rebuild of their track system, or they can extend their maintenance on that.

All of these are driven around customer support agreements where we can have an agreement from a parts kit and inspection regime right through to we will look after it, all you need to do is focus on your job. And that can even go down to the larger contracts where we have a maintenance repair contract where we get into things like availability guarantees for our customers. Lots and lots of different solutions that our dealers are working on and we're working with our dealers to make sure we satisfy their needs.

Now, all of this -- all of these options that we have rely on us understanding the condition and the opportunity for the equipment. And to do that, you need to have connected assets. And we've talked about this a bit, but we have well over 2 million assets in the field today. That's under 10 years, both machines and engines, and some of the other group presidents talked about their breakout in their industry. Of those, we have about 550,000 of them connected today and the majority of the products, the vast majority of products today coming out of our factories are connected. So naturally, this percentage of connected assets over time is going to go up.

But part of this strategy is to rapidly accelerate our connected assets out in the field. And so we're working very hard at looking at what are the products out there, how do we connect them up so we can provide better insights to our customers on how they optimize their uptime and ensure that they can get the productivity out of the products they can. This is really, really powerful.

So the exciting thing for me is how does this all come together and I ask that you bear with me on this slide, it's a little bit of a busy chart but it is exciting about how this all comes together and why we're excited about this opportunity. It starts on the left-hand side, regardless of the industry, and you saw the technologies that each group president talked about for their individual industries. We connect the asset and we understand the hours, we understand the location, we can understand the fuel consumption, the health of the product. If we tie that with data like repair history, fluid analysis from our oil-sampling fluid facilities, equipment inspection like we talked about track, and site conditions, we then really start to get some insights about what's going on with their product.

You tie that with domain knowledge, global scale data, which allows you to get faster insights and engineering expertise and we can really tailor our solutions to our repair options, customer support agreements and rebuilds. All of it designed to what's in the right-hand box, which is lowering our customers' owning and operating costs, producing higher productivity for our customers and easy to do business with and a trusted partner and adviser to our customers. That's the heart of making sure our customers are more successful working with Caterpillar than any of our competitors.

So Customer & Dealer Support Group is committed to driving value for the product segments and our customers. We're investing in our dealers and we're committed to our dealer distribution network. We really want to leverage global scale because it gives us great insights and speeds the decision-making and improving the uptime of our customers' equipment. Connecting assets and using those digital technologies to get insight and drive tailored solutions is the key to that and we want to do all of this by being the easiest to do business with.

We are very, very excited about the opportunities we have ahead of us, and I'd like to thank for your time today. Thank you.

Now I'd like to introduce Brad Halverson, our CFO and Group President, to talk to you. Thank you, Brad.

Brad Halverson - *Caterpillar Inc. - CFO & Group President*

Thanks, Rob. Well, good morning, it's great to be here. As most of you know, I've announced my retirement early next year and so before I get into the presentation, I just wanted to thank you. You know us very well, you're clearly very smart, but how you've interacted in the relationships that we've developed over the years are important to us and I just want to thank you before we get into this.

So Jim rolled the strategy off today and kicked it off and the heart of that strategy is profitable growth. And what I'd like to do is to go through the financial review but before I get into kind of where we're moving forward, I've got just 2 charts kind of on where we've been.

Again, this is no surprise to any of us, but the recent past has been a significant challenge. I took over from Ed Rapp as CFO in January of 2013, which turned out to be the start of the most prolonged downturn in our history. We've never had 3 years down. I think in the '30s, one time, we had 3 years down. I think in my career, which I hired in 1988, we had a history of 1 to 2 years down. And so, 4 years consecutive downturn, all of us know the reasons, softening demand for commodities, falling commodity prices, inconsistent spend on infrastructure, sluggish worldwide economy. All that exaggerated by the downturn in the mining business. At the peak, we sold 1,700 large mining trucks and Denise shared those numbers with you. We produced 60 to 70 past year.

We focused on trying to react 2 ways: One, aggressively and ahead of what we thought could happen because we were not sure when things would recover; and the other is thoughtfully. And I would say that as we move forward, the aggressive and thoughtful actions that I'll share with you, I think are producing a great base for this company to move from in terms of where we're at right now.

A few things helped us from the strategy we rolled out in 2010. Many of you remember our old structure, but having a structure around our segments which we rolled out in 2010, allowed us to make decisions a lot faster. OPACC's helped in terms of the balance sheet and cash management which was a measure we started in 2010. And then we introduced to the organization down through the lowest levels this idea that there's an expectation of incremental and decremental margins. And I could say when we did this in 2010, we had no idea that we'd be trying to manage a 25% to 30% decremental with this kind of volume drop. And I'll tell you it also hurt that the volume came out of mining, which was good margin product and the drop in oil which is also good margin product for us.

So what has happened? One, that we've taken out significant period cost structure out of the organization in terms of our decrementals. So we've beat the decrementals that we had set over this period. If you go back from 2016 compared to 2014, it kind of normalized for incentive pay, we've taken out $1.5 billion of period cost. And I can tell you that that's a big number, but it was a lot harder than $1.5 billion. We protected the things directly that we knew would benefit us moving forward. I would tell you in some past downturns, we might start and stop R&D programs. It's not very effective or efficient, especially for our customers. We protected our R&D programs; significant investments, over $10 billion if you go back to 2012 to 2016, directly trying to protect that. We protected digital. We protected a lot of things that we felt were important for the company which put more pressure on support cost and that more pressure on support cost required us to make some real structural changes in our cost structure to become more efficient and those are going to stay with us so we're going to stay on top of that.

We've also taken out a decent amount of our footprint. 20 million square feet is either complete or in process. It's roughly 25% of our manufacturing in square feet. But we've maintained the capacity for the foreseeable future. You're going to see us leverage lean in our supplier network as we move forward in terms of managing our capacity.

All this has produced a pretty strong balance sheet. We're in good shape in our debt-to-cap. We've generated ME&T operating cash flow from 2013 to 2016 of $26 billion. Good free cash flow, which we define as operating cash flow after capital expenditures and dividends, over that period; and $10 billion on cash on hand at the end of second-quarter 2017.

So you guys all know that, but what I really want to emphasize is that puts us in a great shape right now moving forward coming out of a tremendous downturn in our business.

So we like our markets. Each of my peers have presented a lot of different facts and you know all those yourself with your research. We believe they have good potential for long-term growth. The world is growing. People need better living conditions. That drives demand for energy and infrastructure. We believe our products and services are uniquely positioned to capitalize on those trends. Infrastructure's been underinvested. Maintenance on current infrastructure is well behind if you look at the number of roads in the backlog in terms of the infrastructure maintenance. Air travel, energy demand, all those things, we think put us in a unique position to help our customers build a better world. And again, we think they have good potential for long-term growth.

We have great strength, a long history in the company. If you go to the far right, we have great people. I hope you get a chance to meet Cheryl, she's outstanding. We're really fortunate to have her with us in terms of leading that piece. But we have a really strong team. Largest installed base, field population, over 3 million machines and engines. A history of trying to capture the customer, a very complete product line and Rob talked about the dealer network which is a big strength for us.

So let's turn our attention a little bit to the strategy and I'll try to explain a little bit and I thought that Bob did a great job with CI of trying to talk about how do you operationalize the operation and execution model, what does it really mean? At the heart of it is profitable growth, which is our clear definition of winning. And Jim, is changing the company and this is the way we're going to run the company is through the operating and execution model. We had great success with CI in terms of how we're operating. It will drive growth, profitable growth through margin expansion, expanding our offering, the focus on services is going to be great for our customers and for us. We're going to move to a long-term measure of OPACC which I'll talk a little bit about and then the governance is going to be very strong and it's already started. Jim has changed how we meet as an [EO]. We're spending a lot of time with governance around each of our business in terms of how they're executing the operating and execution model, and how they're growing services and I think that's driving a good culture inside of our company.

So how does it work? Well, first of all, we need entrepreneurial business leaders driving results. It's not a cookie-cutter formula that just produces an answer out of a spreadsheet. We need strong business leaders driving results, understanding their customers, understanding how our customers make money, how we create value, how they can make make more money with us. Where is the industry dynamics? Where it's heading. And then marrying that up with facts and data, with a very detailed understanding of where we compete, what the industry dynamics are and what our competitive position is. No opinions; we have a robust process around facts and data about where we're at.

And then we have these business leaders developing strategies. And I will tell you if we leave here and you believe the operating and execution model is about getting out of things, then we did not do a very good job of explaining it. The operating and execution model is about getting our strategies and our resources to the places that create the most value opportunity, profitable growth. Many of those, I would say most of those are in areas of strong industries and we are well-positioned. And we want to grow in those areas. Huge value from the O&E model by getting resources in those areas.

And there are some things that we need to fix. And we have fixed some. CI has fixed some. BCP is a good example of something that can really be fixed and turned around in terms of our small product line.

So the real key to this is to -- you guys know us externally but maybe -- and a little bit internally, but I would guess I might know us a little bit better internally. This works in our company, right now. We've been at it for a while. We changed our planning process last year and we like operating like this. And the trick is really getting in a practical way your resources applying to those things that are going to offer the greatest value. And I think we have a good progress, a good planning process last year, but we like operating like this and we like the governance model that Jim has put in place. We think it really positions us well, and I believe operating in this fashion is really going to create a lot of value for our customers and a lot of value for us. It's a very disciplined approach to execution.

Our goals. We've had OPACC for a while. As I've mentioned, we're really looking at long-term OPACC growth. We don't need an improvement in OPACC from one year to another because a business unit decided not to invest. So we want our units investing. We want them to grow. A big part of the O&E model is growth, so we're looking at long-term OPACC growth. We have targets for all of our units long term in terms of what we expect and what they're going to invest in and what it's going to generate in terms of growth. And free cash flow remains very important, again, in our definition, the operating cash flow less CapEx and dividends.

Quality and safety are cornerstones in terms of how we operate. The thing that will be new for the company internally in terms of an enterprise measure is services growth. And I think that's real positive, really driving a lot of good behavior. A number of assets with connectivity, active customer support agreements, a very ready broad definition of services across the business groups.

So you've seen these charts from a variety of segments coming up here, kind of same process that we're looking at this moving forward. Again, if you look at where we've been historically, you see that on the left side of the equation, so we think at a sales level of $55 billion, we've been operating historically at a margin level of around 12%. And we would expect to improve that in the neighborhood of 2 to 5 points. So 14 to 17 points would be our expectations moving forward at a sales level of $55 billion.

We believe that operating this model in this way will generate really good cash flow, cash flow that will allow us to grow and invest as we move forward. And that reinvestment advantage is something that's really going to help us with our customers and versus our competitors. And these are a few things that we've talked about here today and they'll change, perhaps, 5 years from now. But the idea is that if you do this in a right way, you have the cash to invest in things that are going to help your customers in a way better than your competition and that allows you to grow.

And that leads us a little bit into cash deployment. So if you look at operating cash flow, on the left is kind of our history, if you were to look at adding up the years 2012 to 2016. The first thing I'd say is that our priorities for deployment of cash have not changed. We've shared them with all of you over the years. Credit rating is very important to us, CAT Financial is important to us. It's a great stable part of our earnings, it's a great part of our customer value proposition and customer loyalty. It's been very well managed coming out of '09 was a big test for them which they passed.

And if you look at the last 4 years and kind of look at their credit portfolio and their profit, it's a strong group. And so credit rating remains very important to us and we want to be Mid-A Stable as we move forward.

We want to grow, and we'll have the cash to grow. Growth is a very important part of the business. We want that to be smart growth, profitable growth. Expanding our services, expanding our offerings in the right way.

Our pension funds are essentially sunset-defined benefit plans at this point, so that number is relatively stable. As Jim mentioned earlier, our CapEx would be below our depreciation and amortization, as we look forward in the next few years. And then the return to shareholders. The dividend decision is a board decision, but we would target continued dividend growth. We're very proud of 23 years' track record of raising the dividend.

And we're also very proud in this downturn generating free cash flow with a very high dividend payout ratio, still generating free cash flow. So return to shareholders remains very important to us in this regard.

So my last chart before break. Just talk where we're at. Again, it's been really hard the last 4 years. A lot of good people were laid off. A lot of things had to occur in terms of how you run the business, but this company is absolutely stronger than it would have been if we had not had 4 years down. We would have not rationalized the footprint in a way that's going to generate more efficiency and less period costs. We would not have made, I believe, the huge structural cost reduction in our core cost, which we will have moving forward. Our industries have opportunity for growth. We like how we're operating internally. We've a good track record of execution over the last few years. It's comfortable internally how we're making decisions in operating and the O&E model's going to be the way we work and this emphasis on services in terms of our culture is going to be really positive.

So we're well set to commit on our -- to deliver on our commitment for profitable growth. For my time, I think right now the company is in the strongest position it's been, moving forward.

So we're going to take 15 minutes and then we'll get some chairs up here. And based on the history, we won't have any problem getting questions from all of you. I know that. So thank you.

QUESTIONS AND ANSWERS

Amy Campbell - *Caterpillar Inc. - Director of IR*

Welcome back. We're ready to get started with the Q&A portion of today's presentation. The hands are already up, but I'll give you guys the instructions. First of all, we're going to rotate 2 sides. Matt and Jenny have the mics. So if -- before you guys ask your question, if you could state your name and your affiliation, that would be great for the transcript. And it looks like we're going to have no problem filling up questions. Where is Matt? Oh, there he is. Matt, can we go ahead and start with the first question? And Steve, we'll let you start one question and one follow-up please so that we can get to everybody in the room.

Steve Volkmann - *Jefferies LLC, Research Division - Equity Analyst*

(inaudible)

Jim Umpleby - *Caterpillar Inc. - CEO*

Oh, it's not on yet.

Amy Campbell - *Caterpillar Inc. - Director of IR*

There it is.

Steve Volkmann - *Jefferies LLC, Research Division - Equity Analyst*

Good?

Amy Campbell - *Caterpillar Inc. - Director of IR*

No.

Jim Umpleby - *Caterpillar Inc. - CEO*

No, not yet.

Steve Volkmann - *Jefferies LLC, Research Division - Equity Analyst*

I can just shout.

Amy Campbell - *Caterpillar Inc. - Director of IR*

I heard it. Can you talk? Go ahead and say your Stephen.

Steve Volkmann - *Jefferies LLC, Research Division - Equity Analyst*

So it's Steve Volkmann with Jefferies, and I'll ask both my questions at the same time. Maybe you can...

Amy Campbell - *Caterpillar Inc. - Director of IR*

I will.

Steve Volkmann - *Jefferies LLC, Research Division - Equity Analyst*

So it's about the margin targets. And I'm curious, and the first part of the question is, the range of targets for CI resource is pretty broad. And I'm curious how you're thinking about what would you get you to not be in the bottom of that range. And then secondarily, you didn't really talk much about your incremental margin targets that you kind of have in the past. Is it fair to assume those still hold? And so if we get revenue above where you're talking about it, that margins could go above those ranges or on the other side maybe below?

Amy Campbell - *Caterpillar Inc. - Director of IR*

All right. So Steve Volkmann with Jefferies. His first question is on the CI and RI margin's pretty broad range, what would drive kind of that variation and margin percentages. And then the second question was...

Steve Volkmann - *Jefferies LLC, Research Division - Equity Analyst*

Incremental margins.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Incremental margins or targets for incremental margins. You guys want to go ahead and take that one?

Brad Halverson - *Caterpillar Inc. - CFO & Group President*

They can talk about their segments, I think, a little bit in terms of where we're at. I think when you look at the strategy, we gave you some numbers. We've given you different numbers in the past, and I think our approach is different this time as to say well you know at $55 billion, and you can define what you think that is, we're saying at $55 billion, this is kind of a range in terms of where we would expect our operating margins to be. And if you did the math on that, that's still a decent pull-through versus kind of what we've been historically. So if you're asking, do we still expect good pull-through? The answer is yes. But I would say that our approach is just a little bit different in terms of how we're talking about it and thinking about it. We want to profitably grow. We want to exercise the O&E model with the focus on services. And so, internally, we're really looking at margin growth. We're looking at sales growth driven even on flat industries as a result of some of the initiatives we have going on. And we think that we'll produce segment margins that we like. And so does that mean we're going away from incrementals in terms of are we now expecting 10% incrementals? No. We're still expecting good incrementals. But we're just I think mentally focusing it a little different saying we want to exercise the O&E model, smart resource allocation, grow our business, invest in the right areas that's going to generate good segment margins and, therefore, good Caterpillar margin.

Jim Umpleby - *Caterpillar Inc. - CEO*

And maybe just to expand upon that a bit, again -- and Brad explained it a bit. We're really focused on the long term and long-term growth. So it isn't good enough just to hit an incremental margin from one year to the next. What we're really doing is putting in government's process in place so that -- wherein each business has a plan for long-term profitable growth. We have milestones that we're measuring them against and those are very important to hit. So it isn't good enough to say, well, I hit an incremental margin. That's not good enough. We are really looking long term, and we want to invest in those areas that represent the best opportunity for future profitable growth. So it's more than just in incremental. It's a long-term growth strategy investing, again, with the bias towards those areas that represent the best return long term and growing our business that way. So it's a bit of a nuance message, but it's more than just hitting an the incremental margin target year to year.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Jenny, next question?

Joe O'Dea - *Vertical Research Partners, LLC - VP*

Good morning, it's Joe O'Dea with Vertical Research. First question, Jim, just in terms of talking about kind of the heart of the focus right now being profitable growth, but also within the 5 things you laid out talking about share growth and maybe you're talking about how you kind of strike a balance between those today and how that balance was different 5 years ago where I think the perception may be a little bit heavier emphasis on share?

Jim Umpleby - *Caterpillar Inc. - CEO*

Yes, I guess what we're really emphasizing and focused on is the future. And one of the things we talked about is the fact that we do intend to grow share, but we intend to do it in a way that generates profit for both us and our dealers. One of the things that we're doing, as you heard Bob talk about and I mentioned as well, is we're expanding, as an example, our life cycle value products, which should allow us to in fact grow share, but do it profitably for both us and our dealers. So it's not a binary situation where it's one or the other. It's, yes, we want to grow share, we want to do it profitably and we're investing in ways that should allow us to do that.

Joe O'Dea - *Vertical Research Partners, LLC - VP*

And then just to follow up on autonomous vehicles. And Denise, I think we heard last night about a 20% productivity improvement in some of the autonomous trucks that you got out there. Could you talk about just how the revenue and profit picture changes from autonomy? And in terms of that productivity and those gains, meeting fewer trucks in the field but then utilization of those trucks just -- how you're looking at that? And whether autonomy is actually a net negative for Caterpillar?

Denise Johnson - *Caterpillar Inc. - Group President of Resource Industries*

We'll, I mean, it really is a question that has been asked over time, especially as you investigate not only improved productivity, but extending cycles for maintenance and the whole value prop as you start to really stretch to maximize the productivity within a mine site. So as we're looking at the alternative, which is to not be the solution set for autonomy and allowing someone else to come in and be that solution, we see the potential for commoditization of our products if we allow someone to get in between us. So as we look at autonomy, not only as a services revenue, which it is an important revenue driver for the future and we don't disclose, of course, what that revenue is at this point within the segment. But we look at it to say we want to be that solution set. We want to provide the productivity improvement with our equipment, which we think we can do at a better way than someone who just understands and brings in the technology itself. So it's optimizing for the site. It's getting closer to our customers than we have ever been before. We've always been on mine sites. We've always been there to help service equipment. But it's different when you're in a mine site and you're helping to improve the productivity of the entire site and not just service one piece of equipment. So where autonomy I think really plays well into our future and allows us to really understand our customers to a larger degree is that we're involved with things that we've never been involved before. We're solving problems we've never solved before that may even not have to do specifically with our equipment, but the interaction with our equipment together with another piece of equipment that may be unrelated to Caterpillar to allow that miner to optimize. And that's where the really value prop comes in for, not only the customer, but for us. We understand our customer better than ever before. And as a result, you get that trusted adviser relationship built to a much larger degree so that you become the preferred supplier for the future, not only for equipment, but also for services and aftermarket.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Matt, next question?

Tim Thein - *Citigroup Inc, Research Division - Director and U.S. Machinery Analyst*

Tim Thein from Citigroup. Staying with you Denise, as more of the machines sold in the super cycle reach the point in which they may have been historically been replaced, what are your conversations with the miners tell you about what the future replacement curve may look like? And I guess just the second part of that is, you highlighted earlier the growing interest in retrofits. And I'm just curious what -- in that case, what does -- how does that impact the assumed life of the machine when you go through a retrofit?

Denise Johnson - *Caterpillar Inc. - Group President of Resource Industries*

Right. We track and look at the fleets and replacement cycles and the extension of the life of equipment continues to grow. And so as we look at how long a piece of mining equipment will be operating in a mine from even 5 to 10 years ago to how long it will live today, it is longer. So as you look at that and say what will replacement demand be for the future, it's clear that that's extended and that, that curve may not be as aggressive as it was in the past. If you look at most of what happened at the super cycle, however, it wasn't necessarily replacement demand which drove that increase. It was really expansion of new mines that were under development and chasing after that additional dollar of output in a mine site where they added equipment that perhaps if they would have been more focused on productivity, they wouldn't have added. And so to me, as you look at the downturn that took place after 2012, it was absorbing a lot of excess capacity that was out there that the miners had purchased because at the time, the economic decision was one more piece of equipment will get me more output versus how do I really refine the mine site as I move forward. So definitely a shift in thinking to say, let's really optimize similar to like a factory and how we're looking at our operations to utilize the most efficient asset base possible to get the most out of those assets. And that is, really, I think the big quantum leap shift in how they think of replacement demand moving forward. There still will be trucks that will need to be replaced, and those cycles will return. And we have a trajectory from how that will move forward. But it's going to be at a slower pace overall.

Amy Campbell - *Caterpillar Inc. - Director of IR*

All right, Jenny, you've got next?

Nicole DeBlase - *Deutsche Bank AG, Research Division*

Nicole DeBlase from Deutsche Bank. My first question, I guess, goes to the way you've provided targets for E&T and Construction. So I think you've said $23 billion of sales, and I think the word normalized was thrown out there and $21 billion of sales, again, normalized for Construction. And if I go back to the model, I mean, that looks closer to where you were from a prior peak perspective. So I guess I'm just curious for both of those segments, what the path is to get back to that level of revenue and where you see the opportunity for growth?

Jim Umpleby - *Caterpillar Inc. - CEO*

Maybe I'll just jump in there and answer it. So we really didn't try to put those out there as revenue targets. What we were trying to do is talk about margin expansion, and we tried to pick numbers for all 3 segments where in fact it's a number that we've achieved in the past and tried to share what our operating margins were with those sales levels. And to share with you the next time we get to that sales level, we'll in fact have expanded margins and we'll perform better. So that was really our goal. It wasn't really to say here's a sales target. It's more about operational excellence for an achievable level of sales for each segment. So that's what we were really focused on there.

Jamie Cook - *Credit Suisse AG, Research Division - MD, Sector Head of United States Capital Goods Research, and Analyst*

Jamie Cook, Credit Suisse. I guess, 2 questions. First, Jim, when you look at your product portfolio and determining which products are underperforming their cost of capital, what inning of the ball game are you in terms of identifying the parts of your product portfolio that are underperforming?

Jim Umpleby - *Caterpillar Inc. - CEO*

Repeat the second part of that question? (inaudible) in the first part.

Jamie Cook - *Credit Suisse AG, Research Division - MD, Sector Head of United States Capital Goods Research, and Analyst*

So what inning of the ball game are you in...

Jim Umpleby - *Caterpillar Inc. - CEO*

Inning of the ball game.

Jamie Cook - *Credit Suisse AG, Research Division - MD, Sector Head of United States Capital Goods Research, and Analyst*

In terms of identifying which of your products are underperforming and what's the time line to fix that? And then my second question, when you provided your view of revenue segment targets over the longer term, part of it is market recovery, part of it is CAT's ability to grow above the market via aftermarket or increased product offering. Can you sort of help us understand how much is market versus CAT's ability to outgrow?

Jim Umpleby - *Caterpillar Inc. - CEO*

Sure. I haven't really thought about the O&E model in terms of a baseball analogy, but I'll give that one some thought. But the reality is it's a never-ending journey. So it's on a situation where we'll say, all right, we are 30% of the way through, we're 60% of the way through. This is the way we will manage the business moving forward and it's kind of -- it's like a lean journey, it never ends. So what is common for many large industrial companies if they have a large group of products and as long as that large group performs well, oftentimes, not a lot of attention is paid to it. What we're really doing that's different is that we're peeling the layers of the onion looking at by product, by application, by market and understanding are we getting acceptable returns in each of those categories? And then we have a governance process, which we put into place that includes the whole executive office where we look at those details and we're asking our business leaders to come up with detailed plans to fix those areas that aren't producing an acceptable return on our investment. But even more importantly, we're asking those that are performing well to grow faster. And it all comes down to resource allocation and bias in our resources to those areas that represent the best opportunity for future profitable growth. But again, it's not a situation where I can quantify to you, we're half way through, we're 10% of the way through. This is the way we're going to manage our business moving forward. And it really never ends. You just have to think about it. And I can't remember the second question, I'm sorry.

Amy Campbell - *Caterpillar Inc. - Director of IR*

The second part of the question is what percentage of our growth comes from industry versus kind of new offerings?

Jim Umpleby - *Caterpillar Inc. - CEO*

Yes. So what we're really looking at is, again, improving operational performance. And at a sales level, that is the same as what we've achieved in the past having better performance. I'm not sure I can quantify for you what's coming from -- how much of the sales will come from industry growth versus new products. We're trying to get out of the industry growth forecasting business publicly, so what we're really going to try to focus on is our own performance.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Jenny?

Jerry Revich - *Goldman Sachs Group Inc., Research Division - VP*

It's Jerry Revich, Goldman Sachs. I'm wondering if you can talk about -- maybe this is a question for you Rob, the connected assets that you have in the field. How much better is your parts capture when you have the connected assets and predictive maintenance? And as you think about the next cycle and Software as a Service as part of the autonomy package, how much more significant is the aftermarket opportunity for you at the next time you get to that sales level that you folks laid out compared to the last cycle? Can you frame that at all for us?

Jim Umpleby - *Caterpillar Inc. - CEO*

So a couple of things, right. So It's a combination of not only connected asset, which is important, but also the combination of the CSA. So it's those 2 things. So what we've proven in some parts of our business is that if in fact we have a long-term service agreement, which we call a CSA, then we have -- we connect that asset that allows the dealer to more cost-effectively execute that customer service agreement. So it's really a combination of the 2 things. It's the service agreement and connecting the asset, which really drives improved aftermarket opportunities, both in terms of parts and service. Now, quantification. We're not going to give you a quantification today, but we've demonstrated in fact it does create additional opportunity.

Jerry Revich - *Goldman Sachs Group Inc., Research Division - VP*

And are you willing to talk about for the connected fleet that's out there? What's the magnitude of the increased opportunity?

Rob Charter - *Caterpillar Inc. - Group President of Customer & Dealer Support*

It's -- I mean, it's the same -- it's almost a piece of string question, right? So it depends if it's -- what application it's in, if it's an RI, E&T or CI product. But as Jim said, it's all about when you have better insights on the product. And remember sometimes that's extending -- remember this is the benefit of the customer, it's extending some of the maintenance intervals because of the application as well. So it really depends on the cycle that it's in, the productivity of the equipment that's being utilized. But we do know that when you connect an asset and have better insight and you put a support agreement attached to that, it is a better opportunity for us, and it's a better outcome for the customer as well.

Jim Umpleby - *Caterpillar Inc. - CEO*

And maybe one way to look at it, our Solar Turbines business is not a bad example. So that's an area where we have a large percentage of the gas turbines in the field are connected to (inaudible) the last few years. And it also have a fairly large percentage of those that have a long-term service agreements. And we're -- and oftentimes, what we wind up doing is extending the overhaul period, right, which may be a bit kind of intuitive, but it's the best thing for the customer. And what we found over time is that allows us to be more of a partner in our customer's operation. It allows us to increase [pins], increase share and allows us to increase all the services that we provide and find ways to bundle new services for the customer. So its a win for the customer. And we found over time it's been a big win for us as well.

Jerry Revich - *Goldman Sachs Group Inc., Research Division - VP*

And can you talk about, as part of the operating and execution model, if you folks are successful with the 5-year goals or however you slice it. What's the incremental contribution that you're looking for beyond industry growth? How would you frame that? And what level of contribution did you embed in the normalized margin estimates relative to -- I'm sure you have more aggressive internal and external targets. Maybe you could frame that?

Amy Campbell - *Caterpillar Inc. - Director of IR*

Are you going to take that? I think -- and I think Jim said this. We certainly embedded in those margin performance targets that we sent out today are improvements from our projects we have around the operating and execution model that we believe that we can deliver. A breakout of exactly what's coming from the actions what we've taken in the past versus what's coming from the plans we have in the future, we don't have that. But it's a combination of both of those things that enable us to deliver those improved margins on those historical sales levels.

Jim Umpleby - *Caterpillar Inc. - CEO*

And again, we're targeting improved performance on flat industry, right? So we're not just sitting back and counting on an industry to grow for us to improve our operational performance and our financial performance. We're saying we're putting specific plans in place even if the industry is flat to improve our performance. That is one of the main tenants of what we're trying to accomplish.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Matt or Andy?

Andy Casey - *Wells Fargo Securities, LLC, Research Division - Senior Machinery Analyst*

Andy Casey with Wells Fargo Securities. I just have a question on the definition of OPACC at this point. What do you consider the capital charge today? And has that changed over time?

Amy Campbell - *Caterpillar Inc. - Director of IR*

Brad, you can take that?

Brad Halverson - *Caterpillar Inc. - CFO & Group President*

Yes. I mean, our capital -- it's changed a little in the last couple of years. If you're referencing history maybe 7, 8 years ago, we had used a pretty high rate, which was intended to almost be a filter for projects. 2010 when we went to OPACC, we basically went to our weighted average cost of capital that we have as a company. Then if you take that number pretax, that's what we're using so -- around 13.

Andy Casey - *Wells Fargo Securities, LLC, Research Division - Senior Machinery Analyst*

Okay, Brad. And then a follow-up on -- is there any thought around taking that down to the segment level looking at kind of the volatility of the returns either generated by the end market just kind of a risk-adjusted charge?

Brad Halverson - *Caterpillar Inc. - CFO & Group President*

You know what we have done internally is it tended to keep one cost to capital number across all of our business units to charge them for their assets. We want them to be motivated to improve margins, prove asset efficiency and for any asset they put in place to make sure we're earning our cost to capital in terms of the resource allocation. As we make investment decisions, we tend to do that a risk-adjusted return. But in the core measurement system, what we have found is that once you grant one exception, every single unit wants to spend 95% of their time debating what their cost to capital should be and 5% executing. So we've kind of taken that out of their equation, left it at one number and dealt with -- kind of as we approve projects, dealt the risk-adjusted return at that time.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Yes. Jenny?

Ivan Feinseth - *Tigress Financial Partners LLC, Research Division - Director of Research*

Ivan Feinseth, Tigress Financial Partners. Could you give us an idea of what your focus are on R&D spending will be autonomous technology? And what do you see as being the biggest driver of new product introductions over the next few years?

Jim Umpleby - *Caterpillar Inc. - CEO*

So what we've tasked each business to do is look at the R&D spending that makes sense for them. Now certain things we've talked about today, certainly, you saw the autonomous demonstration yesterday. That's important. Expanding our digital capabilities continues to be very important. We've talked about life cycle value products. So again, what we're doing is really trying to look both short term and long term and invest in R&D in areas that will help make us successful. But there is -- we talked a lot here today about the increased emphasis on service, on connectivity, on digital. So those are areas that you can bet that we'll be spending money on.

Ivan Feinseth - *Tigress Financial Partners LLC, Research Division - Director of Research*

And what do you see is the biggest driver of new product introduction? Or what types of new products will you bring into market over the next few years?

Jim Umpleby - *Caterpillar Inc. - CEO*

So we're not going to give you a list of products. It really is just more of a strategy discussion to talk about the general areas that we'll be investing in.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Matt, he's got it.

Ben Coyne - *Citadel - Analyst*

(inaudible), Citadel. Wondering if you could talk a little bit more about cash generation. I mean, given the CapEx to DNA and the capacity that you have to generate like $1 per share of cash per year above earnings. So you talked a lot about the areas that you're going into, but could you address that more? I mean, you're going to have a large cash balance very quickly at the level of growth that you're talking about.

Brad Halverson - *Caterpillar Inc. - CFO & Group President*

Yes. We didn't -- purposely, we did not provide a cash flow number to you guys today, so we're not going to do one now. I would say that a big part of our deployment of cash remains growth. I mean, we have a lot of areas to grow around our customer base since driving our customers around services. I think that will drive a lot of activity across our units with that focus. So I think, you're correct. I mean, to the extent that the number we showed of $55 billion and the margins we showed, we're going to have a really strong cash flow. And we have a good starting balance today. I'm not -- we're not going to give you a number today, but we think it's a good position to be in to be able to have that cash to reinvest into the business. And we're going to be pretty active across the groups in terms of looking at how we can spend that on growth.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Steve?

Steve Fisher - *UBS Investment Bank, Research Division - Executive Director and Senior Analyst*

Steve Fisher, UBS. Of your 3 segments, I'm not sure I would have picked the construction segment to be the biggest potential margin improvement segment, given the industry structure and some of the cyclical change we've had in other segments. So can you just flash out, on a comparative basis, why you think the construction segment would have the biggest potential margin improvement? How you get to those numbers? And then the follow up question is you talked, Jim, a lot about the services focus going forward as part of the strategy. Can you talk about how that's going to translate to revenues for Caterpillar because when we think about services, it seems like it should largely flow through the dealers? So can you talk about how services will generate revenues for CAT?

Jim Umpleby - *Caterpillar Inc. - CEO*

So maybe I'll do the second one first.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Yes, why don't you start with that?

Jim Umpleby - *Caterpillar Inc. - CEO*

Do the second one first. So we're using a broad definition of services. So if you stop and think about it, there are things, certainly, the dealers do and that we do. If, in fact, we have more CSAs, more connectivity, more services, that creates revenue opportunities for parts for Caterpillar. There's also a variety of things that we do directly as well with customers, whether it's in our rail or a Solar activity. Now maybe I'll pitch it to Rob to talk a bit more about just services revenues in terms of Caterpillar.

Rob Charter - *Caterpillar Inc. - Group President of Customer & Dealer Support*

Yes. So we -- if you think about things like CAT finances and other part of our services revenue as well, we do work -- sorry?

Jim Umpleby - *Caterpillar Inc. - CEO*

Reman.

Rob Charter - *Caterpillar Inc. - Group President of Customer & Dealer Support*

And Reman products as well. So there's a lot of areas. We do some consulting work as well in terms of the analytics. We do with through the dealer or directly with the customers. So there's an enormous amount of space where we're actually working and enabling either our dealers or ourselves to help our customers in that space. So I hope that's a little clear about what we're trying to do.

Amy Campbell - *Caterpillar Inc. - Director of IR*

And so on the second question, Bob, I think you can take that. Construction Industries is an early adopter of the O&E model. Maybe you can talk about some of the things that Construction Industries has already done that's demonstrated some of the improvement in segment margins that you showed today.

Bob De Lange - *Caterpillar Inc. - Group President of Construction Industries*

Yes, and I think to that specific question, I mean, I'm focused mainly on improving the performance of the Construction Industries segment. But as we mentioned in the presentation, I mean, CI was probably one of the early adopters within Caterpillar to really have that discipline, execution and focus on improving our business using the CI business. Part of it is also if you look at historically, a number of years ago, I would say that Construction Industries is probably also had more room for improvement in terms of improving margins in our business. But the numbers we have shown are really a roll-up of over the very granular detail of single and individual at model, at territory level and aggregating that up as to see -- what we believe we can achieve in the years to come in terms of margin improvement.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Good. Thanks, Bob.

Joel Tiss - *BMO Capital Markets Equity Research - MD & Senior Research Analyst*

Joel Tiss from Bank of Montreal. I wonder why the margin target range in Resource Industries is so wide. And why it's so much further away from the prior peak versus the other segments that seem like they're going to be able to exceed prior, or whatever, prior -- your prior benchmark levels you laid out?

Amy Campbell - *Caterpillar Inc. - Director of IR*

(inaudible)

Jim Umpleby - *Caterpillar Inc. - CEO*

(inaudible) is the sales level, of course, is much lower than the peak. So if you look at the sales levels for the other 2 segments, they are nowhere near as depressed from the peak, if you want to compare it to the peak, as it was in RI. That's one reason.

Denise Johnson - *Caterpillar Inc. - Group President of Resource Industries*

Yes. And I would say the methodology that we leveraged here, and I think, obviously, some confusion in what we're really trying to show. So we're trying to look at demonstrated performance of what we call normalized levels of sales. And certainly, the peak of $20 billion, we don't think is normalized level of sales. So when you look over the last 4 or 5 years, what would we consider to be normalized level 2013, 2014 was the range of year that we selected sales in that time frame and our demonstrated performance on operating margin for that time frame. So then, looking at that and saying, if all things considered, we fast forward with all the implementation of the initiatives that we have, how much margin growth do we see at that sales level that we would achieve, it's that range of the 2% to 6%. So as you look at that and really analyze it, it's not trying to imply that is a normal peak or a normal valley. That's just demonstrated performance and the margin growth that we'd expect from the initiatives that we're implementing over time. So hopefully, that helps.

Joel Tiss - *BMO Capital Markets Equity Research - MD & Senior Research Analyst*

And then second, Jim, I just wonder if you could -- since most of us don't know you very well, can you talk a little bit about your style? And what are some of the largest challenges that you think need to be focused on, need your maximum attention, say, for the next 12 months?

Jim Umpleby - *Caterpillar Inc. - CEO*

So one of the things that we're doing maybe to talk about how we're operationally changing is that this team is spending a lot more time together, and we talked about, as we roll out the O&E model, a heightened governance process. So we're spending a lot of time together in O&E reviews, business-by-business looking at those areas that, again, represent the best opportunity for future profitable growth and ensuring that we are allocating our resources appropriately, given those growth opportunities. We're also spending time on the challenged businesses, ensuring that we have milestones set up to get those -- to improve those. And so again, a lot of it is just governance in the way we're spending our time together. Clearly, there's plenty of challenges ahead, but we're very excited about our future. And we think we have great potential moving forward.

Ross Gilardi - *BofA Merrill Lynch, Research Division - Director*

Ross Gilardi from Bank of America Merrill Lynch. So to just back on the cash balance, I mean, it's, obviously, a nice problem to have. You got $10 billion in cash, and you're probably free cash generative even though you didn't give numbers. So can you talk about your appetite for doing a larger acquisition in this environment? And what -- maybe what some other priorities would be or how do you think about it in terms of balancing? Do you target your -- the areas of business you're in right now and consolidate some of those industries versus maybe doing something that adds an additional leg to the company or is more focused on services and connectivity and a lot of these other themes that you're -- you seem to be doing comfortably right now?

Jim Umpleby - *Caterpillar Inc. - CEO*

We're continually -- all of our segments are continually evaluating M&A opportunity. It's something that's just a way of life for us, and so that'll continue. We'll do that through the O&E lens, again, making those acquisitions in those areas that represent the best opportunity for future profitable growth. If you look at the ET -- E&T segment over the last few years, we have made some acquisitions in the digital space, if you will. And so I suspect that we'll -- as we focus more in growing services, that's one area that we'll probably be looking at. But again, we'll also look at expanded offerings. Tom talked about what the -- both the Kemper acquisition and the acquisition of Berg Propulsion a few years ago, which allowed us to have a larger solution for our marine customers. So there isn't one answer the question. We'll evaluate opportunities in each segment, both in services and in hardware, and think about those areas that represent the best opportunity for future profitable growth. So there isn't one answer to say we're going to do a, b or c.

Ross Gilardi - *BofA Merrill Lynch, Research Division - Director*

Okay. And then just the follow-up was maybe it's more for Rob Charter. But dealer consolidation, could you talk a little bit about that? Because there's quietly been a lot of dealer consolidation around the world for Caterpillar. And what's your view on that? Do you want to have fewer, stronger dealers around the world? Do you want to keep your dealer network fairly fragmented? And should we expect your dealer network around the world to continue consolidating as we go forward?

Rob Charter - *Caterpillar Inc. - Group President of Customer & Dealer Support*

So I think the answer is we measure and work with our dealers on 3 criteria: it's their performance; it's their alignment with Caterpillar; and it's their continuity going forward to make sure we got a clear line of sight. And so when you see dealer changes -- and we don't talk a lot about that as you're well aware, but as we see dealer changes, it's usually always related to one of those 3 things. Now there's been some recent announcements lately where there's been a couple together, so it looks like an acceleration. But in all fairness, it's been the consistent approach to that as for many years as we go forward. That's not a sign of any trend. It's just talking about those 3 things. And remember what we talked about or what I talked about in the presentation, we have to drive consistent and high performance in our servicing of our customers. And we need that because customers are more and more mobile every day today. The marine was a great example that you can't afford to have your weakest link being the denominator that everyone bases off. So performance, alignment and continuity are the 3 measures that we work with our dealers on every day.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Right. Here. Yes, Rob?

Rob Wortheimer - *Melius Research - Analyst*

It's Rob (inaudible) Research. For Bob, when you think about the customer-facing segmentation you're talking about in the Construction segment with high use case and medium use case and low case, makes a lot of sense. But how do think that fits with how you're factories are ready? I mean, the past CAT has tried buffer inventory to sort of balance out factory production lane and then PDCs, and you've tried standardization of trying to get things standardized. So do you feel like that segmentation is going to pull us any factory challenges? Maybe more broadly, could you just talk about how you feel lean has come in to the factory as whether you're ready to ramp up if we do see a surge in construction sales?

Bob De Lange - *Caterpillar Inc. - Group President of Construction Industries*

Yes, thank you. It's a good question. I would say that in everything we do, we want to start with our customers, make sure we help them be successful. And as I explained, we use that segmentation to understand the various applications or various load types under which our customers use our equipment and making sure that we provide the right choices that help customers for each of those applications be successful. Now how do we then bring it from the market internally into our design and our factories? I would say that the first step is in the design where we're making a conscious effort, as I had shown for Wheel Loader example, that all of -- that range of products are not all individual different products that are designed differently from the ground up. But to the maximum extent possible and increasingly going forward, we're utilizing a modular design concept, so that we can start from the same base platform and scale it depending on the type of application that we're going after, so that we can maximize our R&D efficiency, minimize the parts count that we create while, at the same time, offering the range of choices for our customer. But I would say it's the first step. Second step then is when we bring it to our factories. Yes, I mean, We're clearly focused on our lean journey. We have made some progress already. We still have a lot more to go and plans of what we want to further improve. But there as well, I believe the goal of what we're doing is synchronizing our value chains, utilizing lean, and so that we can, in the end improve, inventory turns and also be more responsive to our customers. Part of that is also making sure we have less finished goods inventory where we would need a wide variety, especially as you expand your range of offerings to the market, but making sure that we move part of that inventory upturn, have more, I would say, component inventory rather than finished goods inventory, so that we can keep that flexibility to manufacture a wider range of products without, at the same time, expanding our finished goods inventory. So without continued progress on lean, it would be hard to implement this strategy. But as I said, starting from the customer, making sure we design that way as well, and then utilizing lean to make it manageable throughout our factories. We believe we have a way to do this and to offer that and make sure that, that growth and offerings also presents a profitable growth for us as Caterpillar.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Cliff?

Cliff Ransom - *Ransom Research, Inc. - Founder and President*

Cliff Ransom, Ransom Research. Can I just dig down a little bit in this -- in the process of planning? Does Caterpillar use the Hoshin methodology? Or do any of your divisions use that sort of policy to plan and template? And if so, which ones are best at it, and why?

Denise Johnson - *Caterpillar Inc. - Group President of Resource Industries*

We leverage a lot of different methodologies for how we plan and execute in the lean journey. So currently, if you'll look at the methodology that we deployed with lean, it is starting from a market-back assessment and then from a design perspective, really getting into understanding how you link up the value chain from the customer all the way back through to the supply base. One of the opportunities that we've had is we've really looked at our manufacturing footprint and really tried to integrate in lean concepts and lean designs is the timing of how to orchestrate that as you're doing new NPI. So as we've looked at the introduction of modular design and lean concepts, you have an opportunity, certainly, when you do a new product introduction to do that in a holistic way. So right now, in many of our factories, we have legacy designs with certainly not an optimal setup from a lean perspective to pull through all of that optimization. And so being able to integrate in a factory, both the legacy as well as the new product introduction where you can do it holistically from the ground floor and move forward, makes it a little more challenging for how fast you can implement. And certainly, from an R&D perspective, while we've invested heavily in technology and new product introduction. In some cases, we've had to resource allocate to other models where the return was greater, and so the -- it is a slower mechanism to make that evolution. But absolutely, that's part of the plan and part of the process.

Cliff Ransom - *Ransom Research, Inc. - Founder and President*

(inaudible)

Denise Johnson - *Caterpillar Inc. - Group President of Resource Industries*

The OE?

Cliff Ransom - *Ransom Research, Inc. - Founder and President*

(inaudible)

Jim Umpleby - *Caterpillar Inc. - CEO*

The O&E model or EO, I'm sorry?

Cliff Ransom - *Ransom Research, Inc. - Founder and President*

(inaudible)

Jim Umpleby - *Caterpillar Inc. - CEO*

Yes.

Cliff Ransom - *Ransom Research, Inc. - Founder and President*

EO. I said on the EO, right?

Denise Johnson - *Caterpillar Inc. - Group President of Resource Industries*

Yes.

Cliff Ransom - *Ransom Research, Inc. - Founder and President*

It's not a department up?

Denise Johnson - *Caterpillar Inc. - Group President of Resource Industries*

I don't -- on lean...

Cliff Ransom - *Ransom Research, Inc. - Founder and President*

I'll take it offline. Very helpful.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Okay. Next question? Right there on the back row.

Jairam Nathan - *Daiwa Securities Co. Ltd., Research Division - Research Analyst*

This is Jairam Nathan with Daiwa. So with regards to the margin revenue, what kind of pricing assumptions have you built in?

Jim Umpleby - *Caterpillar Inc. - CEO*

In regard to the what kind of revenue? I couldn't hear [that part].

Jairam Nathan - *Daiwa Securities Co. Ltd., Research Division - Research Analyst*

The long-term revenue and margin targets.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Pricing assumption.

Jairam Nathan - *Daiwa Securities Co. Ltd., Research Division - Research Analyst*

Yes. What's the pricing assumption that's...

Jim Umpleby - *Caterpillar Inc. - CEO*

So we're not going to disclose one number. What each segment has done is look at the competitive environment that they're in by product, by market, by application, and they've made, we believe, reasonable assumptions that allowed them to develop those margin expansion targets, which we talked about. So there isn't one price number. It's very detailed based on by segment, again, by product, by geography, by application. So it's a bottoms up roll-up at a very detailed level.

Amy Campbell - *Caterpillar Inc. - Director of IR*

I think if you'll look at the recent past back several years, I think what that would suggest is it's been a very competitive environment from a pricing perspective. And so I don't know that we expect that to change going forward either.

Jairam Nathan - *Daiwa Securities Co. Ltd., Research Division - Research Analyst*

And as a follow-up just on CapEx, in a future downturn, how low can you go on the CapEx? And how -- and what are the major areas where you would be investing in CapEx?

Jim Umpleby - *Caterpillar Inc. - CEO*

I think the best way to answer that question is, I believe that we've have demonstrated our ability to manage during the downturn. We had a 40% revenue -- sales decline between 2012 and 2016, and we demonstrated our ability to, again, perform acceptably. So I did mention that we believe that our CapEx investment will be less than depreciation and amortization for the foreseeable future. We think we are well positioned from a manufacturing capacity perspective, again, for the foreseeable future. So I think that's the way I'll -- the best way to answer that question.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Eli.

Eli Lustgarten - *ESL Consultants, Inc. - President*

Eli Lustgarten at ESL Consultants. I have semi-technical question. And that we heard a lot about autonomous drive -- equipment. And when you talk about before, I find it moving into CI or semiautonomous, what have you. And as part of the example, you talked about maybe you have to incorporate, you sure have said it, Komatsu piece of equipment and theories. Can we talk a little bit about whether you have to open your systems to them as they open unit systems to you? Or is it an industry standard that you're able to connect to nonfleet equipment? How that's being handled? Because I can't imagine that they're going to let you go in to incorporate without them having a shared opening.

Denise Johnson - *Caterpillar Inc. - Group President of Resource Industries*

It's a good question. There's been a lot of debate from an industry perspective on how to approach interoperability with competitive fleets. And certainly, there's a strong desire by some in the industry to move towards a very open architecture, which allows that interaction. As it exists today, we, in fact, don't have an open agreement with, Komatsu to integrate their product into our autonomous solutions. So we have to backwards engineer that solution in, and so that's really how we've gone about doing that. Certainly, we've recognized that in order to operate connected assets, we have to be able to connect Caterpillar and non-Caterpillar assets, and that is part of our overall strategy. But how you get there is not through, right now, an open architecture. It's backwards engineering into a solution set that allows us to bring them online in an autonomous way that allows it to operate productively.

Eli Lustgarten - *ESL Consultants, Inc. - President*

And on a different subject, with all the changes that you're running in the operations, are you changing your supply chain relationships to go -- throughout the corporation as you go through this somewhat maybe more conservative approach in doing what you can that you can control with both -- with market? And my reason for the question is that you filed construction equipment. You know it's much more volatile than we've ever seen. Nobody predicted a 50% gain in China if you go back again. And this market could turn up fast. So you could get to $55 billion a lot faster that you expect as it was ever, and I know it's more of a stimulus program over an infrastructure program or any of those things taking place. So how do you handle those things in the way you're operating the company today versus the fact that you have this highly cyclical marketplace that could bounce quickly up and down much more rapidly than you expected?

Jim Umpleby - *Caterpillar Inc. - CEO*

Yes. So one is we talk about as a competitive -- a part of a competitive and possible cost structure, supply base is certainly important. And we're having a lot of discussions internally about the best way to make changes to deal with that. Certainly, in some areas, we've had a very large increase in demand over a short period of time, and we're working with our supply base to get through that. But it's a very legitimate question and one that we're working on currently.

Amy Campbell - *Caterpillar Inc. - Director of IR*

Next question.

Chris Weltzer - *Anchor Bolt Capital - Analyst*

Chris Weltzer, Anchor Bolt Capital. I was wondering just in the context of this new plan and you taking over leadership. Maybe talk about how you're structuring incentives for your management team. You have a very strong OPACC focus, but there's also clearly longer-term investments you need to be making in digital and maybe other emerging markets, et cetera, and how do you incent that while also focusing on OPACC in the near term?

Jim Umpleby - *Caterpillar Inc. - CEO*

Yes. Between now and the end of the year and early next year, we'll we working with the Compensation Committee of our board to develop the right kind of executive compensation moving forward. So we haven't -- we have nothing to announce today. That's something that'll -- we'll work with the board over the next 6 months.

Amy Campbell - *Caterpillar Inc. - Director of IR*

And I think this will be the last question.

Rob Wortheimer - *Melius Research - Analyst*

It's Rob. Rob (inaudible). So as you think about the strategy that CAT has and the strength of the installed base and the focus on service and CSAs and getting things connected and really making that go, you guys have never disclosed really your aftermarket revenue as a business segment. Communication with the market -- I mean, what is the holdup in sort of expressing the full sort of power of what CAT can do, so we can benchmark it on what you're achieving and in what you already do have in terms of recurring revenue, that we can maybe understand a little better the business?

Jim Umpleby - *Caterpillar Inc. - CEO*

Yes. We don't intend to change our segment reporting and breakout services separately. So what we've talked to you about is the margin expansion that we are driving towards for a given levels of sales, but we intend to maintain for the foreseeable future, are the segment reporting that we currently have.

Amy Campbell - *Caterpillar Inc. - Director of IR*

And I think with that, Jim would you like to wrap it up?

Jim Umpleby - *Caterpillar Inc. - CEO*

Sure. Just again, we'd like to thank all of you for taking time out of your busy schedule to visit with us in the last couple of days. We hope you enjoyed the time at Tinaja. We really wanted you to see our product to give you a sense of what's really possible in the digital era, with autonomy, what scenario we're leader in. We hope you feel our enthusiasm. And again, I'm very, very fortunate to have such a great team of executives to move us forward. Thank you very much.