

CATERPILLAR®

2017 ANNUAL REPORT



**OUR SOLUTIONS
HELP OUR
CUSTOMERS
BUILD A
BETTER WORLD**



How We're Fulfilling Our Purpose to Help Our Customers Build a Better World

In 2017, we developed a clear statement reflecting Caterpillar's long-standing purpose: Our solutions help our customers build a better world. We also developed and began implementing a new enterprise strategy to support that purpose and achieve long-term profitable growth. With Our Values in Action as a foundation, we leverage a data-driven approach, known as the

Operating & Execution (O&E) Model, to identify and prioritize business opportunities that offer the greatest potential for profitable growth. Through strategic focus on operational excellence, expanded product offerings and services, we better understand our customers' needs. That helps us deliver the industry-leading solutions they use to build a better world.



To Our Shareholders

Jim Umpleby
Chief Executive Officer

Caterpillar’s resilient global team delivered excellent results in 2017. As demand improved during the year, they capitalized on the opportunities to serve our customers around the world.

They also introduced new products, further developed our digital capabilities and moved forward with the changes inherent in our new strategy.

In 2017, our sales and revenues increased 18 percent to \$45.5 billion. Profit improved from a loss of \$0.11 per share in 2016 to a profit of \$1.26 per share, and 2017 adjusted profit per share more than doubled to \$6.88.

We ended 2017 with a strong balance sheet and more than \$8 billion in cash. Our dividend remains a high priority, and we have paid higher dividends for 24 consecutive years. Since 2007, our cash dividend has more than doubled.

We Provide the Solutions Our Customers Use to Build a Better World

One of my first initiatives after becoming CEO in January 2017 was to appoint a diverse, cross-functional team of Caterpillar leaders to develop a strategy for long-term profitable growth. We never lost sight of the fact that our customers have been using our equipment to help improve living standards around the world for more than 90 years.

We wanted a clear statement to capture that historic and enduring purpose and found nine simple words: Our Solutions



Help Our Customers Build a Better World. Our customers are at the center of our purpose and helping them to build a better world motivates our employees every day.

A New Enterprise Strategy for Profitable Growth

We introduced the new enterprise strategy in September. Our overriding objective is to grow profitably by reinvesting in our strengths, which will deliver value for our shareholders.

At the foundation of the strategy and all we do is our long-standing Code of Conduct, Our Values in Action. These values – Integrity, Excellence, Teamwork, Commitment and Sustainability – define who we are and how we behave with our stakeholders and with one another.

Equally fundamental to our strategy is the Operating & Execution (O&E) Model, a powerful methodology to gain a granular understanding of our financial performance by product, region and application. With the O&E Model, we also evaluate market economics and assess our capabilities to win. Then we work to address areas where we are not producing acceptable returns and to invest in areas with the best opportunity for future profitable growth.

We identified three areas of strategic focus: services, expanded product offerings and operational excellence.

We'll further develop our services, emphasizing digital technologies and the aftermarket. We're expanding our product offerings to meet our customers' diverse needs and help reach new customers as well. We intend to deliver operational excellence by continuing our commitment to world-class safety levels, the highest product quality, Lean manufacturing principles and a competitive, flexible cost structure. We also must attract, retain and develop the most talented team of global employees.

To maintain Caterpillar's industry leadership, we know our customers need to be more successful working with Caterpillar than they are working with our competitors. Our strategy includes better alignment with our business partners, including the global network of 171 Cat® dealers serving 192 of the world's countries. When our customers buy our

Our customers are at the center of our purpose and helping them to build a better world motivates our employees every day.



products, they know they will be supported by this most extensive, capable and reliable service network in our industries.

These essential components of our strategy are well underway. Here are some examples from 2017:

- We introduced our first major excavator redesign in 25 years. The next generation of excavators is just one example of how we are expanding product offerings to better serve the diverse needs of our customers.
- We increased our focus on services. We grew our connected asset population by 24 percent and invested in solutions that help our customers operate more efficiently, sustainably and safely on their job sites.
- We made organizational changes to decentralize and increase the speed of decision-making, giving our leaders more authority and accountability to successfully compete in their industries.

In 2018, we expect to make additional investments to expand product offerings and services. We'll become a more agile company and use the O&E Model to bias resources to areas that represent the greatest opportunity for profitable growth.

A Better World: One Community at a Time

The Caterpillar Foundation is making progress toward our goal of alleviating extreme poverty. Since 1952, the Foundation has invested more than \$715 million in communities around the world and invested more than \$33 million in 2017 alone. By investing in water, shelter, access to food, energy and education, disaster relief and preparedness, and a cleaner environment, the Foundation's grants empower people to develop resilient and sustainable communities.

The Foundation also invests in and matches contributions to the Red Cross Annual Disaster Giving Program, making funds immediately available for global disaster response. In 2017, this included an additional \$300,000 donation for American Red Cross Hurricane Harvey relief in recognition of our employees and facilities affected by that storm.

We also continued to emphasize and invest in sustainability, both in our products and how we manufacture them. We were pleased to be named to the Dow Jones Sustainability World and North America indices, for our 18th year. Extensive information about those efforts can be found in Caterpillar's 2017 Sustainability Report.



We have many competitive advantages and, with a solid strategy and disciplined execution, there are tremendous opportunities in the years ahead. It's an honor for me to lead this great company.

Handwritten signature of Jim Umpleby in blue ink.

Jim Umpleby
Chief Executive Officer

Our overriding objective is to grow profitably by reinvesting in our strengths, which will deliver value for our shareholders.

OUR CUSTOMERS ARE BUILDING A BETTER WORLD

Population growth, an increasingly urbanized society and an emerging middle class are driving continued investment in infrastructure, energy and mining to meet the needs of people everywhere. With a company purpose to help our customers build a better world, Caterpillar plays a vital role in assisting our customers as they respond to these changing demands.

By 2040, world energy consumption is expected to **INCREASE 28%**¹



Through 2030, **\$3.3 TRILLION** in annual global infrastructure investment is needed to keep pace with expected growth.²

By 2025, global construction market growth is expected to be **\$15 TRILLION**³



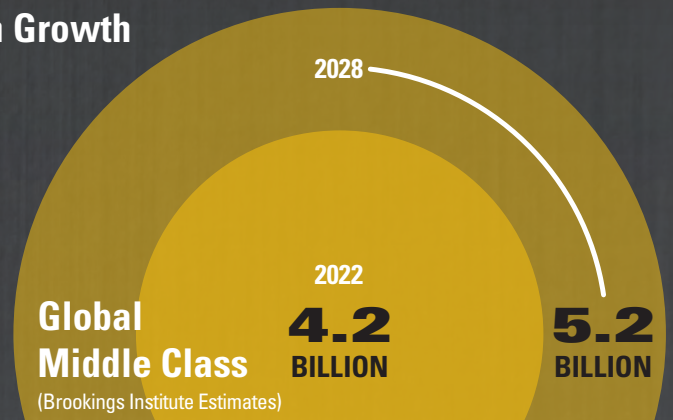
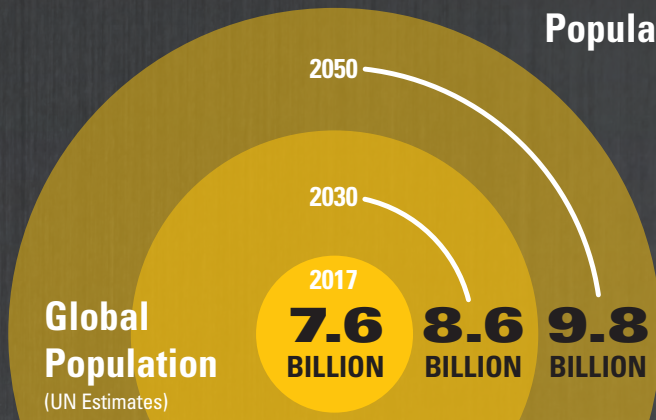
¹ IEA World Energy Outlook 2017

² McKinsey & Company – Bridging Global Infrastructure Gaps, Our Insights

³ PwC Global Construction 2025



Population Growth



By 2020, emerging markets will account for **63%** of global construction.³



⁴ Africa Construction Trends Report 2016
⁵ Economic Times – Railways' target: Laying 9.5km of tracks every day, 2017
⁶ NY Times – China Builds Out the Air as Frustrations Mount Below, 2016

CONSTRUCTION INDUSTRIES

Better Machines to Build a Growing World

Caterpillar's Construction Industries segment is primarily responsible for supporting customers using machinery in infrastructure, forestry and building construction. The majority of machine sales in this segment are made in the heavy and general construction, rental, quarry and aggregates markets and mining. Together with our independent dealers, we support more than 1.4 million active earthmoving, excavation and building construction machines in the field, with over 100,000 new customers since 2014. Global trends like population growth and urbanization point to increasing needs for infrastructure, particularly in developing markets such as China. In 2017, more than half of our sales came from outside North America. We expect global growth to continue.



Operational Excellence

- Decreased the number of defects customers see in the field by an average of 30 percent.*
- Reduced assets by \$2.8 billion.*
- Utilized Lean principles to synchronize our value chain – improving our inventory turns by over 50 percent and right-sizing our manufacturing footprint.*
- Together with our partners in China, we implemented innovative solutions to improve velocity and flexibility that allowed us to capture tremendous excavator industry growth opportunities and meet increasing customer demand.

*Since 2013



SERVICES

Caterpillar is increasingly using technology to help our customers be more successful – whether through improved efficiency, safety or intelligence. Cat® Payload on wheel loaders, for example, allows customers to improve efficiency of quarry sites by bringing onboard weighing systems to the cab to improve operator accuracy and speed

by reducing error and rework. Similarly, Cat GRADE with Assist on excavators automates boom and bucket movements to deliver precise cuts with less effort. And, Cat Compact for asphalt, landfill and soil compaction equipment brings advanced measurement and real-time guidance together to help operators hit compaction targets every time.

Cat® Link

Tracks asset and fleet performance to increase uptime and lower costs

Cat GRADE

Boosts grading efficiency by up to 50 percent

Cat Command

Improves operator safety, equipment availability and site productivity with remote control technology



Next Generation Excavator 320 GC ▶



Expanded Offerings

A portfolio of Next Generation 20-ton-size class excavators – the 320 GC, 320 and 323 – represent our first major excavator redesign in 25 years. Each model is designed to meet the unique needs of different application profiles, from heavy to medium to light duty. The new machines increase operating efficiency, reduce fuel and maintenance costs, and improve operator comfort compared to previous models. As a further productivity boost, the Cat® 320 and 323 have the highest level of standard factory-equipped technology in the industry.

RESOURCE INDUSTRIES

Advanced Solutions to Meet Customers' Toughest Challenges

Cat® machines and technologies operate in some of the toughest environments on Earth – from the deserts of Australia to the oil sands of Canada, from 4,500 meters above sea level to nearly a mile underground. Today, more than 80,000 machines provided by the Resource Industries segment work around the clock in mines and quarries to meet the world's need for mined materials. As population growth continues and the demand for energy, infrastructure, transportation and household goods increases, we expect the demand for our products to increase as well.



Operational Excellence

- Achieved record best safety performance with 59 percent reduction in recordable injury frequency.*
- Decreased assets by \$3.9 billion (38 percent reduction).*
- Improved quality through 17 percent reduction in defects experienced by customers.*
- Optimized global manufacturing footprint through closure or restructuring of 25 facilities.**
- Strengthened the integrated supply chain by focusing on acceleration of Lean principles across the enterprise.

*Since 2013

**Since 2012

Caterpillar Autonomy

Moved	Traveled
700	13
MILLION TONNES	MILLION MILES

Cat Command for Hauling in 2017



Expanded Offerings

As we're supporting our customers above and below ground, we always have an eye on the future. We're making significant advancements in engineering – from full electric-drive and battery-electric options to more wear-resistant components. And we continue to bring new products to market across mining applications, including additions to our truck lineup that can provide the ideal loading and haulage system for every surface application.

◀ The new Cat® 794 AC electric-drive truck



SERVICES

New Technologies

We're focused on the future, combining our OEM core, mining experience and technology expertise to deliver new solutions that no other provider can offer. By collaborating with other industry leaders, we are increasing the velocity with which we bring new products to market.

Automation

We continue to lead the industry in mining automation, with the world's largest single autonomous fleet of haul trucks and proven solutions for drills, dozers, underground loaders and longwall systems.

Aftermarket

Together with our independent dealers, we make sure our customers get the most from their investment in Cat® equipment through rebuilds, retrofits and upgrades, as well as quick delivery of new, used, exchange or remanufactured parts.

Site Solutions

We work alongside customers to help them improve performance across the site – leveraging machines, technologies, services and our combined expertise to create holistic solutions that optimize operations, improve safety and reduce costs.



ENERGY & TRANSPORTATION

Powering the World's Energy Needs

Caterpillar's Energy & Transportation (E&T) segment helps move goods by sea and rail and powers buildings and equipment, including our own machines. Our multiple strong brands have a long history of success: Since 1925, we have built over 20 million engines and have installed 750,000 generator sets. We have grown through acquisitions that allow us to expand our offerings to customers. And we still have plenty of distance to travel. With 15 percent of the world's population without electricity, and 2 billion people wanting access to power by 2040, Caterpillar delivers energy and transportation solutions that keep the world powered.*

*IEA World Energy Outlook 2017



Operational Excellence

- Decreased manufacturing space by approximately 13 percent.**
- Reduced assets by more than \$1 billion.**
- Realized significant material cost savings and period cost reductions in the past three years.**

**Since 2013

Since 1925, we've built over

20 MILLION

engines



Expanded Offerings

Thanks to our acquisition of Kemper Valves & Fittings, we now offer a 3500 engine, transmission, well stimulation pump and high-pressure flow iron as an integrated solution to our oil and gas customers.





SERVICES

Sustainability Through Reman

Caterpillar is a global leader in remanufacturing technology, with E&T recycling more than 1.5 billion pounds annually.

Rail Infrastructure

The Rail division is a complete rail industry solutions provider. Our rail services go beyond the train to the surrounding infrastructure.

We supply track work and signals to the railroads.



Solar Turbines' Service Success

Solar provides 24/7 field service support along with a suite of offerings throughout the entire life cycle of the equipment.



CUSTOMER & DEALER SUPPORT

Using Technology to Drive Value in the Aftermarket

Caterpillar's dealer network is one of our greatest competitive advantages. The 150,000+ employees who work for 171 global dealers at more than 2,100 dealer branches do much more than sell machines and engines. The dealer employees serve our customers for the entire life cycle of a product, from choosing the right equipment for job sites to providing parts replacement and rebuilds. Parts availability is a top consideration for customers across industries. Caterpillar is meeting this need better through data, determining, for example, when each of the hundreds of parts in a mining truck may need support. These capabilities make us easier to do business with – which in turn drives value for our customers.



600,000+
connected assets



Operational Excellence

- Using Lean and an engineered value chain to get parts to customers on time.
- Applying data analytics to better plan availability of parts and support.
- Delivering better efficiency and productivity to our customers through aftermarket services and customer support agreements.

Customer Solutions

Meeting customer needs is the driving force behind everything we do. Customers of all sizes can look to us to provide solutions, like fast and convenient e-Commerce purchasing options that fit their preferences. With customer support agreements, our customers receive tailored solutions that fit individual needs based on their industry and equipment. Customers can also optimize uptime and productivity with condition monitoring where experts at the dealer watch what's happening with the asset and give advice on repair options. These are important ways we achieve profitable growth.





SERVICES

In-Field Support

More than half of the dealer employees focus on in-field support, going the distance to maintain equipment and ensure uptime at remote mine sites, marine harbors, farms and more. An on-site presence allows timely service and advice that considers a site's precise specifications.



Financing & Rental

Equipment leasing and financing by Cat Financial with payment plans to meet customer cash flow needs are an important part of dealer offerings.

To meet the expanded and growing needs of our customers, Caterpillar and our independent dealers have reinvigorated our rental strategy and continue to invest in rental offerings.



Rebuild Capabilities

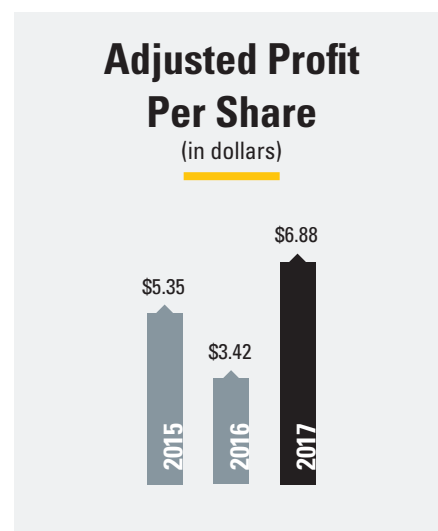
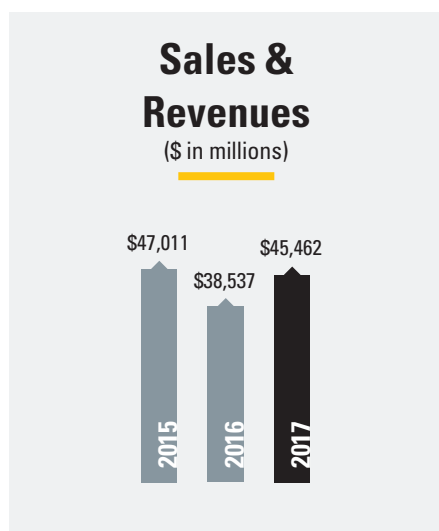
It is roughly 30 percent cheaper to rebuild a component than it is to replace it – so it's no wonder that many customers depend on independent Cat® dealers for rebuild support, whether for engines, hydraulic systems or transmissions.



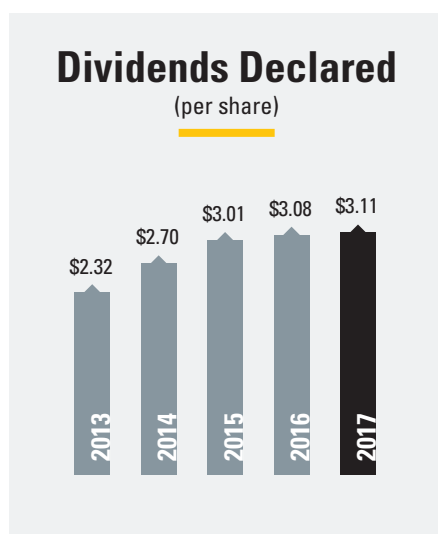
2017 Performance At-a-Glance

In 2017 many of our key markets improved. Caterpillar capitalized on this opportunity and achieved strong financial results. To further improve our competitiveness, we developed and began to implement a new strategy to deliver profitable growth using the O&E

Model as our guide. We're focusing our efforts on operational excellence, expanded offerings and services. Dividends remain important; Caterpillar has paid increasing dividends to its shareholders for 24 consecutive years, and since 2007, our cash dividend has more than doubled.



Shareholder Returns

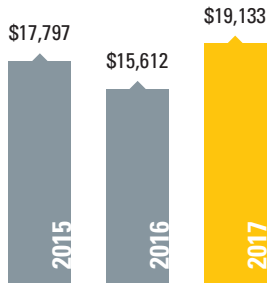




CONSTRUCTION INDUSTRIES

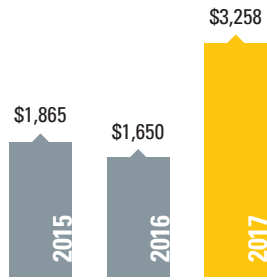
Sales

(\$ in millions)



Segment Profit

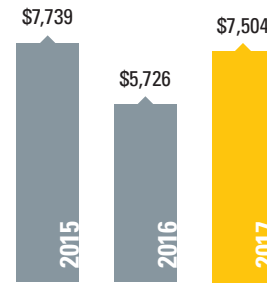
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RESOURCE INDUSTRIES

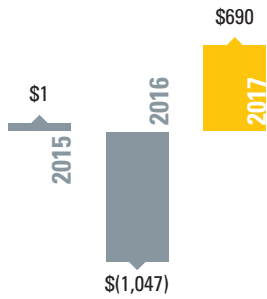
Sales

(\$ in millions)



Segment Profit (Loss)

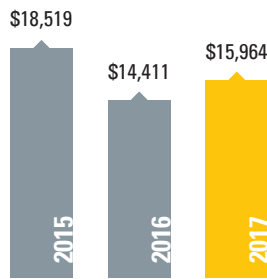
(\$ in millions)



ENERGY & TRANSPORTATION

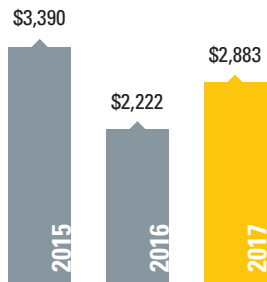
Sales

(\$ in millions)



Segment Profit

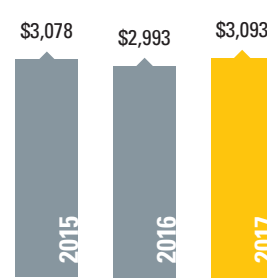
(\$ in millions)



FINANCIAL PRODUCTS

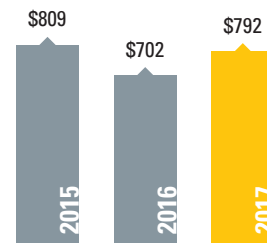
Revenues

(\$ in millions)



Segment Profit

(\$ in millions)



Corporate Governance

Caterpillar's governance structure provides leadership, accountability and transparency to management of the company and its businesses. Our corporate governance framework serves the interests of shareholders with the highest standards of responsibility, integrity and commitment to enhance shareholder value over the long-term. These standards are developed and implemented by our Board of Directors and the Executive Office, who oversee the company's performance and governance policies. Learn more at www.caterpillar.com/investors.

BOARD OF DIRECTORS

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Former U.S. Senator and
Former Attorney General
of New Hampshire

David Calhoun

Senior Managing Director
The Blackstone Group;
Independent Chairman
of the Caterpillar Board

Daniel Dickinson

Managing Partner
HCI Equity Partners

Juan Gallardo

Former CEO
Organización Cultiva

Dennis Muilenburg

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and CEO
The Boeing Company

William Osborn

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Northern Trust Corporation

Debra Reed

Chairman and CEO
Sempra Energy

Edward Rust, Jr.

Former Chairman and CEO
State Farm Mutual
Automobile Insurance
Company

Susan Schwab

Professor
University of Maryland
School of Public Policy

Jim Umpleby

Chief Executive Officer
Caterpillar Inc.

Miles White

Chairman and CEO
Abbott Laboratories

Rayford Wilkins, Jr.

Former CEO
Diversified Businesses
AT&T Inc.

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Jim Umpleby

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Chief Financial Officer

Bradley Halverson*

General Counsel and
Corporate Secretary

Suzette Long

Chief Human
Resources Officer

Cheryl Johnson

Senior Vice President

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Corporate Controller

Kyle Epley

Corporate Treasurer

Richard Moore

Chief Audit Officer

Jill Daugherty

Chief Compliance Officer

Michael McGuire

Assistant Treasurer

Chad Withers

Assistant Secretary

Chad Wiener

Assistant Secretary

Joni Funk

As of April 1, 2018

*Retiring 2018

**As of June 1, 2018

Learn More about our Corporate Governance initiatives and voting on matters for the annual meeting in Caterpillar's Proxy Statement: caterpillar.com/proxy

Learn More

about how Caterpillar is helping customers
build a better world:



2017 Annual Report

caterpillar.com/annual-report



2017 Sustainability Report

caterpillar.com/sustainability-report



