

# INNOVATION YOU CAN BANK ON

More than 8,000 Caterpillar engineers and technical experts are at work around the world, looking for ways to make our products work harder, last longer, cost less to operate and use less fuel. We design products collaboratively, leveraging decades of systems integration expertise to help Caterpillar customers succeed.

## 10 INNOVATIONS THAT SAVE FUEL

We're incorporating features across the product line to make your equipment more fuel efficient.\*

### POWER-DENSE ENGINE

By improving power density, we can give you higher performance in a lighter-weight package, which translates into better fuel efficiency and reduced emissions.

### LOAD-SENSING HYDRAULICS

Load-sensing hydraulics cut fuel consumption by automatically directing the right amount of flow to the implements based on operating conditions. They also reduce heat generation for extra fuel savings.

### AUTOMATIC ENGINE IDLE SHUTDOWN

Thanks to advanced electronics, some machines are programmed with an optional shut down feature that stops the engine after a pre-determined period of idle time, saving fuel and reducing emissions.

### ENERGY RECOVERY SYSTEM

Save fuel without sacrificing performance with an innovative hybrid system that lets you capture and store excess hydraulic energy, then use it later in the work cycle.

### ECONOMY MODE

Running a machine in economy mode when the job allows reduces maximum engine speed and cuts fuel usage by as much as 6%.

### SYSTEM-DESIGNED LINKAGES, BUCKETS & WORK TOOLS

When the working end of your machine is designed as a total system, the result is a wheel loader or excavator that fills its bucket faster, for quick cycle times and excellent fuel efficiency.

### LOCK-UP TORQUE CONVERTER

We put a standard lock-up clutch torque converter in some models—and made it optional for others—so you can meet aggressive production goals while saving fuel.

### ELECTRO-HYDRAULIC JOYSTICK CONTROLS

Intuitive, easy-effort joystick controls help operators—even those with less experience—work quickly and efficiently while conserving fuel.

### INTEGRATED POWER SYSTEM

As the largest vertically integrated manufacturer in our industry, we're able to design the entire power train as a single optimized system that delivers high performance, long life and great fuel economy.

### PRODUCTIVITY & EQUIPMENT MANAGEMENT SYSTEMS

Whether your goal is higher production, lower costs, longer component life, better fuel efficiency—or all of the above—our systems give you the data you need to benchmark performance, set improvement goals, measure progress and achieve results.

And that's just the beginning.

Connect me with my Cat® dealer for the rest of the innovation story.

*\*All features not available on all machines*

**BUILT FOR IT.™**

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# 966M XE WHEEL LOADER

up to

# 25%

The 966M XE Wheel Loader, with an advanced power train, has been designed to deliver superior performance and fuel efficiency while simplifying the operator's interface and operating technique. The XE technology results in up to 25% improvement in fuel efficiency over the M Series standard configuration and up to 35% over the K Series standard configuration.



# 336E H HYDRAULIC EXCAVATOR

up to

# 30%

Power through your biggest, toughest jobs, but cut your fuel bill at the same time when you run a 336E H Hybrid from Caterpillar. Integrated power train components, a Tier 4 Final engine and an exclusive hydraulic hybrid system make the machine up to 30% more fuel efficient than the standard 336E.

AUTO ENGINE IDLE SHUTDOWN

HYDRAULIC HYBRID SWING SYSTEM

ADAPTIVE CONTROL SYSTEM (ACS) VALVE

ELECTRONIC STANDARDIZED PROGRAMMABLE (ESP) PUMP

ON-DEMAND ENGINE POWER

INTEGRATED LINK TECHNOLOGY

OPTIONAL GRADE CONTROL, DEPTH & SLOPE SYSTEMS

SYSTEM-MATCHED WORK TOOLS

THREE POWER MODES: HIGH, STANDARD & ECONOMY



# D6T T4F DOZER

up to

# 7%

Get the pushing power you want for heavy dozing and the precise control you need for finish grading, all in one fuel-efficient package. With its Tier 4 engine, standard Eco Reverse mode and enhanced auto shift and blade control functions, the D6T delivers the perfect combination of productivity and fuel economy.

