

THE SECRET TO WIND FARM SUCCESS

You know that to succeed in this increasingly competitive industry, you need to achieve operational excellence across your windfarms. This means you must ensure every one of your turbines gets the best protection, so you can increase uptime, while minimizing your Levelized Cost of Energy (LCOE). This all sounds pretty simple – but in reality, realizing these goals can prove quite the challenge.

So, what's the secret to overcoming these hurdles and achieving sustainable wind farm success? Well, here's what we recommend...

MAXIMIZING YOUR UPTIME



Almost 40% of unscheduled downtime days are attributed to gearbox failures, costing up to \$200,000 (or more) per event.

MAXIMIZING UPTIME AND MINIMIZING COSTS IS CRUCIAL TO THE SUCCESS OF EVERY WIND FARM.

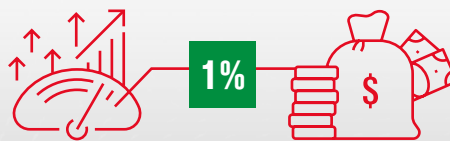
That's why Castrol's Liquid Engineers have developed a range of world-leading lubricants that enable high-capacity wind turbine gearboxes to run significantly cooler by delivering robust surface protection and reducing friction, which provides greater resistance to gearbox breakdown.

IT'S MORE THAN JUST OIL. IT'S LIQUID ENGINEERING.



OPTIMIZING YOUR LCOE

You likely know you need to maximize efficiency – but did you know that just **1% higher efficiency means \$3,700 more turnover per year OR an extra \$100,000 over a turbine's lifetime?**



We combine lubricants expertise with drivetrain engineering and predictive technology to **help you achieve higher efficiency and optimize your LCOE**. Higher efficiency of Castrol gear oils has been documented in several studies. Our worldwide capability offers unmatched experience in managing process improvements and best practices.

POWERING YOUR PERFORMANCE

CASTROL HAS OVER 30 YEARS OF WIND ENERGY EXPERIENCE, DESIGNED TO MEET THE MAINTENANCE DEMANDS FOR YOUR VALUE-CRITICAL PROCESSES.



Our in-depth understanding of the demands of industry and manufacturing has enabled our liquid engineers to develop a comprehensive range of **world-class lubricants** and **product support services** designed to meet the operation and maintenance demands for your value-critical processes.

MINIMIZING YOUR ENVIRONMENTAL IMPACT



Today, wind power supplies 5% of our global energy – but by 2050, it's estimated **demand will grow by 600%**, and millions of turbines worldwide could generate 30% of all energy.

Castrol's technologically advanced products can help you to meet this growing demand, lower energy consumption and waste, and significantly cut CO₂ emissions – but that's only the start. We also created the world's first carbon-neutral gear oils for wind turbines, designed to help you **reduce your carbon footprint, meet the UN's Sustainable Development Goals, and better protect the planet.**



ACHIEVE 360° SUCCESS ACROSS YOUR WIND FARMS

As the No.1 global lubricant supplier for the wind industry, Castrol has the experience and expertise to help you unlock the true potential of your wind farms.

To discover how we can help your business to maximize your success, speak with speak with David DiNunzio on

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to find out more.

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