Choosing the right lubricants and services for your wind turbines can help to make a real difference to the efficiency of your entire operation.

Designed to improve profitability

Keeping wind turbines running efficiently and reducing operating costs can be critical for a profitable business. High-quality lubricants, properly maintained and applied, can help to reduce your operating and equipment ownership costs by providing enhanced protection of critical components to reduce replacement costs and extend turbine life. Well-maintained lubricants consume and maintain through extended life product.

Understanding your needs

Because of our experience of wind power generation across the world, we understand the critical role that lubricants play in turbine operation. We also understand that operating turbines in remote on-shore and offshore areas with extreme climatic conditions and difficult access adds to the challenge. Whether you want to extend maintenance intervals and increase reliability with purpose-designed, low-temperature hydraulic oils or to protect blade bearings from fretting corrosion and false brinelling using specialist greases, we have a wide range of lubricants to choose from.

Delivering value

Having experienced lubricant usage at rated speeds is essential to the overall performance. Long-lasting, high-quality lubricants extend the life of your wind farm’s generating potential. Shell Lubricants can provide tailored solutions tailored to your specific needs. For example, the Shell LubrAdviser service can help to optimise performance and extend the life of your wind farm’s generating potential. Shell LubrExpert service specialises in wind turbines.

Locally supported global products and services

Our network of experts, which serve wind power generator manufacturers in more than 100 countries, can help to reduce operating and equipment ownership costs by providing enhanced protection of critical components to reduce replacement costs and extend turbine life. Well-maintained lubricants consume and maintain through extended life product.

Lubricants – small cost, big impact

Buying low-quality lubricants can be a false economy. Lubricant costs are typically less than 5% of a power generation business’s total maintenance budget. We focus on providing performance products that help to realise maximum efficiency and reduce costs, and services that are designed to improve maintenance and business practices, and to reduce your overall costs.

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WHERE LUBRICANTS CAN ADD VALUE

Some examples of ways that lubricants can help your operation to run more efficiently:

- **Efficiency for your Wind Farm**
  - Over many years of working with the world’s leading wind farm operators, our lubricants experts have developed a deep understanding of your industry challenges. We can use our knowledge and experience to create a lubrication plan for your business and tailor our technology-leading products and services to help you meet the needs of your business.
  - Challenge us to demonstrate how we can add value to your operations by contacting your local Shell Lubricants customer service centre.

- **Improved Reliability:** Greater reliability is achieved by non-lubricated runners, and Shell Omala S4 GX 320 synthetic gear oil provides excellent protection against corrosion. Synthetic gear oils, including 10W/30 viscosity and lower viscosities, offer excellent low-temperature fluidity and long oil life. Shell Omala S4 GX 320 provides benefits for difficulty-maintained wind turbine gearboxes.

- **Outstanding Low-Temperature Performance**
  - with Shell Tellus S4 VX hydraulic oil

- **Efficient Low-Temperature Performance**
  - with Shell Gadus S5 V100 2 high-speed generator-bearing grease

- **Efficient Operations**
  - and extra protection using Shell Omala S4 GX gearbox oil

- **Extended Equipment Life**
  - and operational efficiency with Shell Rhodina BBZ blade-bearing grease

TECHNOLOGY WORKING FOR YOU

Our international organisation, which has experienced turbine lubrication experts, can deliver lubricants with proven performance and multi-supplier manufacturer support whenever you operate. They are the people who develop products that deliver a difference to your business, even under the most challenging conditions. From the Panama Canal and the Airbus A380 to Ferrari, what we learn in our collaborations, we use to create lubricant solutions to help your business needs. And we do not just have the best lubricants; we also have the world-leading field experts working with customers every day to apply these solutions. The result? Technology that delivers value to your operation.

IMPROVED RELIABILITY: Greater reliability is achieved by non-lubricated runners, and Shell Omala S4 GX 320 synthetic gear oil provides excellent protection against corrosion. Synthetic gear oils, including 10W/30 viscosity and lower viscosities, offer excellent low-temperature fluidity and long oil life. Shell Omala S4 GX 320 provides benefits for difficulty-maintained wind turbine gearboxes.

GREATER PROTECTION: The massive blades of a wind turbine are adjusted using grease-lubricated blade bearings, which, if insufficiently lubricated, can fail through fretting and false brinelling. Shell Rhodina BBZ grease is designed to provide protection to bearings against corrosion, moisture contamination and false brinelling at temperatures as low as –55ºC. Shell Rhodina BBZ is lubricating the blade bearings of many wind turbines globally, through our listing with leading blade-bearing suppliers such as IMO, Liebherr, Rollix and Rothe Erde, and wind turbine manufacturers including Gamesa, Acciona, Gamesa, Dong Fang New Energy Equipment, Siemens Wind Power, Sinovel Wind Group and Vestas Wind Power.

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