

# PRODUCT FACT SHEET WINDSIM ACCELERATOR

POWERED BY THE CLOUD

### HIGH ACCURACY WIND FIELD SIMULATIONS IN LESS TIME

WindSim Accelerator helps wind farm investors, developers, consultants and operators develop projects with superior accuracy in less time. This is achieved by wind field simulations performed in the cloud.

The superior simulation accuracy secures wind farm profitability, allowing for increased energy production, reduced maintenance costs and improved financing. Project risks are lowered by using WindSim Accelerator – with high accuracy, high speed wind field simulations.

# At a Glimpse

- CFD technology
- Wind Fields simulations in the cloud
- Subscription-based software-as-a-service

### **Features**

- CFD technology
- Modules: Terrain, Wind Fields, Objects, Results, Wind Resources, Energy
- Wind Fields simulations in the cloud
- Subscription-based softwareas-a-service

### **Benefits**

- Optimal turbine placement
- High accuracy and reliable results, trustworthiness
- Increased earnings visibility
- Reduced project development time
- Higher productivity
- Time freed up
- · No local hardware investment
- Accessibility
- · Unlimited model size
- Continuous access to upgrades through regular releases
- Predictable costs

# **Advantages**

- Bankability
- Better and faster investment decisions
- · Higher, realistic AEP
- Lower CAPEX
- Lower OPEX
- Improved project Rol
- Higher competitiveness

# HOW IT WORKS

Data is imported as a grid file. A 3D model is created, based on the grid file and input properties. To reproduce the local wind climate many simulations of the local wind fields are required. Simulations representing different wind directions, different atmospheric conditions and seasonal variations. In the cloud all these simulations can be done simultaneously. Each single simulation can also be parallelized. Additionally, wind farm projects can be run simultaneously - all in all lowering the execution time. WindSim Accelerator can easily lower your execution time by a factor of 100. Pre- and post-processing takes place in WindSim 11.

# WHAT USERS SAY

"Our project execution has greatly benefited from WindSim Accelerator. Access to abounded computing resources in the cloud has reduced the simulation time from days to hours. Easy access for all members of our wind and site team has further reduced the project execution time."

Utku Unal, Senior Wind & Site Specialist, Statkraft Wind & Site Team

### A COMPLETE SOLUTION

WindSim Accelerator is part of the WindSim family of services to support you in your every need for wind analytics. As a subscriber of WindSim software, you will receive onboarding, regular functionality updates and have access to support. Other services include consultancy and project support, as well as training. Contact us for more information at info@windsim.com.



### **About WindSim**

WindSim pioneered the use of CFD technology to optimize wind turbine placement. WindSim's advanced simulations deliver value for every type of terrain—from the simplest to the roughest—maximizing energy production wherever your project may be. Our highly accurate simulations provide precise results in robust, meaningful reports complemented with rich graphics and interactive 3D visualizations.

Discover why wind energy industry leaders worldwide use WindSim's software and professional services to design the best wind farms possible. Contact us at sales@windsim.com

Stay one step ahead.