Introduction and latest update of O2O WIND International





# How it came into making :

In 2009 I founded a training company doing courses and conferences in wind farm operations. During five years we served clients from 32 countries and six continents.

To secure that we understood the needs of our target group we initiated a smaller group of six energy companies owning wind farms to meet regularly to discuss wind farm operations.

One of the members in this group was Sverre Trollnes, Head of Operations at Statoil (seen on the picture to the right).

In May 2013 me and Sverre had a two hours phone call in which O2O WIND International was born.

We discussed, what if we would develop our small group of only six persons, into something much much bigger, to include a much higher number of competent brains and with that a lot of experiences in wind farm operations so that each member of such a group would have a much better hit rate to find just the right experiences.

During that phone call Statoil came onboard as our first founding partner and Sverre sent me out to find more founding partners. Half a year later I had gathered the ones shown in to the right.

On the 21st of October 2014 these companies gathered at the head office of Acciona Energia in Madrid to launch the platform.

Up until today we have signed on the wind turbine owners seen on the next slide...

KR/ Mårten Nilsson O2O WIND International



# Founding Partners



Please take time for this slide and the rest will be understood

faster





**Current status summarized in 5 bullets:** 

- 6 of the top 10 biggest wind energy producers in the world are members at O2O WIND International
- The members at O2O WIND International represent 18% of the global output from wind
- Signed-on we have more then 200 operation and maintenance professionals i.e. individuals employed by wind asset owners
- We have 40 unique energy companies signed on from 21 countries and five continents



Our favourite slide:

# Satisfied customers - We haven't lost one client

A member signs on for 1 year and then makes the decision to stay on or try something else. So far all members who have arrived at this point have renewed their memberships. Our Founding Partners have all renewed for their 3rd year. The remaining pages address various members reasons to join O2O Wind International





"I consider the group as the best forum to share experiences with other Windfarm owners regarding technical problems and its solution from the point of view of the owners. Together we share a big fleet of WTG that gives us a large common experience that could give us light in technical risks analysis, technical solutions and safety improvements. It also could be a good starting point for other join project, as benchmarking, cost reduction etc"



Cristobal Couret Director Producción Eólica en Acciona Energía







"Our position about the benefits of the platform for our day-to-day business: The Owners' platform offers a unique opportunity to gain insight into wind operations for improved decision-making. It is independent from OEMs, and once trust is built among the partners, and an honest and open communication level is reached in the platform, we will avoid any information biases that have slowed down our processes in the past. We, as asset owners, need to take steps towards full responsibility on actions, to ensure the long-term preservation of our wind turbines."



Alan Henderson, Head of Technical Asset Management, RWE Innogy







"We believe strongly in the development of the windpower sector and the needs to improve and industrialise it. This can only be done fast enough if the industry collaborates and make use of the experience already existing at every given moment - Every proof that windpower is a reliable and safe way of producing electricity will help us grow further. The O2O Wind engagement is one powerful attempt to make sure collaboration is accessible for more people then only the ones visiting conferences etc. and therefor stimulate improvement where things are happening. I look forward to see the results."







"The platform could be a discussion forum, promoting networking and sharing experience among the wind turbine/farms community. The format encourages open debate and is a proven way to discuss and solve common problems and specific WTG issues, identify potential solutions and learn about new developments or retrofits. If you're involved in the asset management, operation and maintenance of WTG this is your opportunity to exchange ideas and improve the performance in a constructive and supportive environment."













"We decided to join because we want to give it a shot. We expect to find expert information on: Blade maintenance, Frequency convertor issues, CMS – sharing of experiences. We also expect to enter a forum where we can discuss and share on major breakdowns, root cause analyses and turbine types. We want to optimise our O&M performance by sharing best practices so we can eventually move to condition based maintenance. That would be the end goal."









#### **Member's Quotes:**

"Our main reasons for entering into the O2O network is to first of all to share experience from operation and learn from other operators. Comparted to other industries there are still some teething issues that is difficult to change when we operate in isolation. We see the need to move maintenance of wind assets in a direction of condition based and less time based. We experience that the OEM's show little interest in contributing to realising a lower cost of electricity. By sharing experience the O2O network can help us be more aware of trends in failures"



Sverre Trollnes, Head of Operation, Statoil ASA







"Our reasons for joining are that we want to have the opportunity to share operational and maintenance experience with other wind farm owners, specific problems and possible solutions for these problems, both to get a better basis for evaluations of turbines and turbine suppliers for procurement."



Jörgen Svensson, Busines Unit Manager Wind, Skellefteå Kraft AB







"Stena Renewable believes collaboration is an important key to increased production and reduction of lost production and LCoE in our wind power assets. O2O Wind can be a powerful tool where valuable information and knowledge could be exchanged very rapidly, strengthening all participating turbine owners in the community. Looking forward to a fruitful collaboration with you all and even more owners to join in the future for an even bigger and stronger network!"



Anders Rylin Head of Operations, Stena Renewables







"We strongly believe in the benefits of sharing knowledge about and experiences with exploitation of wind turbines. Next to sharing our insights, we also like to learn from the knowledge of other owners. The O2O platform provides a nice platform for these discussions."



Kris Aper Construction & Maintenance Manager at Fortech







"Arise believes it is important to share experiences in the area of operation with others. The collective knowledge and experience of the group of members in O2O Wind constitutes a crucial factor to development of the business in a faster way then we can accomplish by our own. We are looking forward to join this interactive platform."



Liane Persson Operation Manager at Arise







"We operate our wind farm for more than 4 years now and we believe that we can share many of ours experiences, but also we need to learn more about the new and challenging ones."



Gabriel Negrescu O&M Manager at CEZ Group







"OGE aims to partner with other owners in our pursuit of operational excellence by collaborating when we or the other members with similar challenges need answers to resolve them. We want to be contributors where we can, but we recognize the opportunity to learn from such a broad base of users with experience in our common turbine technologies."



Josh Fausset Manager Renewable Energy at Oklahoma Gas & Electricity







"NTR is keen to learn and share information with other operators in the wind business. Most of our engineers come from a utilities background and are familiar and comfortable working with peers from other companies."



Joe Dalton Asset Management Director at NTR plc







"Based on previous experiences in the solar business, we believe that a collaborative approach to knowledge sharing across asset owners is key in order to resolve important technical and commercial challenges with the technology itself and OEM as counterparts. We believe that O2O Wind can be a powerful tool where valuable information and knowledge could be exchanged very rapidly, strengthening all participating turbine owners in the community."



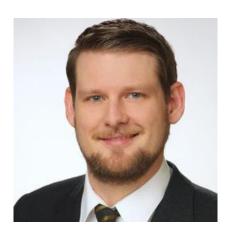
Jordi Francesch Head of Asset Management at Glennmont Partners







"IWB believes it is important to share experiences in the area of operation with others. The collective knowledge and experience of the group of members in O2O Wind constitutes a crucial factor to development of the business in a faster way then we can accomplish by our own. We are looking forward to join this interactive platform."









Trustpower has established many networks with other wind asset owners, with a hope to share knowledge and performance improvement opportunities, but these have often not been broadly supported. The O2O wind platform provided a well-supported and secure opportunity to network with a variety of owners with representation from various levels in the member organisations. Trustpower believes that this type of collaboration will help with industry to be innovative, remain competitive and address issues in a timely manner and we look forward to joining the discussions









To share knowledge and experiences in order to resolve common problems and enact affective AEP enhancements.



John Sturman Technical and Operations Director at Kennedy Renewables





Arrange a live viewing with O2O WIND International:

Set a meeting for a live viewing to see how owners across five continents are approaching wind farm operation in a new way

Simply click the banner below to have an always updated access to our calendars to chose the most convenient time for you.

Access our calendars and book a meeting

/Best Regards

Mårten Nilsson, CEO at O2O Wind International