

Wind Services

ALPIQ

Always the Winning Solution





# We keep an eye on your production

Unplanned downtime or failure of a wind turbine can result in high financial losses. With complete technical operations and specific maintenance activities, we can help you prevent this scenario. At the same time, we help you increase the longevity of your onshore wind turbines. As an owner of wind farms we perfectly understand your expectations towards service providers.

## Our services



## What we offer



### Wind farm monitoring and operations

- Real-time 24/7 monitoring of wind farms (including daily in-depth reporting and analysis)
- Remote reset and restart if required



### Unscheduled maintenance / Troubleshooting

Our teams are able to ensure quality services and fast reaction times for required unscheduled maintenance interventions, including:

- Repair and replacement of components of the main brake and yaw systems
- Repair of all electric, electronic or mechanical failures
- Replacement of main components: power transformer, generator, gearbox





### Full detailed inspection of wind turbines

- Visual inspections
- Inspection of blades and hub
- Oil & grease sampling and analysis
- Video endoscopy of gearbox (the inspection of the main gearbox via endoscopic equipment by our qualified personnel including report of the findings, oil analysis and inspection of gearbox vibration dampers)
- Laser adjustment (measurement of drive train components alignment with laser equipment)
- Visual inspections of safety-relevant equipment



### Rotor blade services

- We deliver a full range of scheduled and unscheduled maintenance and repairs of all types of rotor blades (interior/exterior) as well as of the hub:
- Rotor blade inspection – interior/ exterior – with service platform, rope access technology or high-resolution camera
  - End-of-warranty blade inspection
  - Inspection, repair and installation of lightning protection systems
  - Fastening of the bolts in the blades and hub
  - Cleaning of the blades and hub (interior/exterior)
  - Structural repairs via platform or rope and cradle
  - Application of gel coat and top coat
  - Replacement of the protection foil
  - Replacement of vortex generators
- Our blade technicians have extensive experience in the field and are certified by **BZEE** and **FISAT**



### Technical improvements and retrofits

- We increase the performance and safety of your wind farm, with particular focus on the FL 2500 wind turbines:
- Converter modifications to improve relevant health & safety aspects
  - Yaw brakes modifications to reduce vibrations
  - Repair of blade bulkheads
  - Remote reset of anemometers
  - Regreasing of blade bearings

## Why Alpiq

### Customised solutions

Because we are able to draw on a wealth of know-how and products to put together solutions tailored to individual requirements.

### Sustainability

Because we work with our customers on a long-term basis and are committed to their future viability.

### Partnership

Because we can operate independently in the market and are as enterprising in our thinking as our customers.

### Competitive edge

Because the know-how of our specialists covers the complete spectrum of energy management and is without equal in Switzerland and in selected key markets in Europe.

### Precision

Because we always do justice to our heritage and reputation as a company with Swiss origins.





**Alpiq Wind Services EAD**  
Service centre: T +359 431 67967  
windservices@alpiq.com

[www.alpiq.com](http://www.alpiq.com)

**Main office:**  
Perform business centre, fl.7  
2 Pozitano sq.  
Sofia, 1000  
Bulgaria

**Service centre:**  
38 Tsvyatko Radoynov str.  
Kran, 6140  
Bulgaria

## Think energy – Think service

Alpiq is a leading Swiss energy provider and electricity producer in Europe. We offer our customers comprehensive and efficient services in the fields of energy generation and marketing as well as energy optimisation and electromobility.

We have been generating climate-friendly and sustainable electricity from carbon-free Swiss hydropower for more than a hundred years. Our power plant portfolio also comprises shares in two Swiss nuclear power plants as well as flexible thermal power plants, wind farms and photovoltaic systems in Europe.

As an international energy trader, we are active on all major European markets. With unique expertise in the field of flexibility marketing and cross-border trading, our staff work around the clock to secure the profits of our customers.

The Alpiq Group has approximately 1550 employees and is headquartered in Lausanne.