

One-stop shop for Wind Power projects  
and business transactions

# Wind Power



## We understand the technology

AFRY has more than 30 years of experience providing wind power engineering services such as site screening, Energy Yield Assessments, Technical Due Diligence, Owner's Engineer services, and Technical Advisory for operations improvement and production optimization for wind farms totaling over 150 GW.

## We strive for sustainability

We provide multidisciplinary expert services for Environmental and Social Impact Assessment, permitting and licensing procedures, Land Use Planning, and Environmental Due Diligence.

## We know the markets

We are a leading provider of electricity market studies and market price forecasts. Our thorough understanding of energy markets and regulatory frameworks worldwide gives us a unique position to support clients in entering new markets as well as deciding on their strategy options and acquisition targets. We have provided market, regulatory and commercial advisory services for over 70 GW of technical and over 90 GW of commercial wind projects.

# 400+

wind projects delivered



# Our approach

Developing and building wind power projects requires not just understanding the wind as an energy source and as a force of nature impacting the technical solutions and specifications, but also comprehensive understanding of the broader technical infrastructure, market and regulatory issues impacting the project profitability, as well as the physical, natural, cultural and socio-economic environment surrounding the project site.

Access to a broad spectrum of expertise is therefore a prerequisite for a successful project.

Our expertise covers all aspects of wind energy: from measurements to meteorology, from turbine technology to O&M, from environment to economics, from business strategy advisory to engineering, contracting and overall project management.



- Market reports and price projections
- Policy and regulation studies
- Wind and renewable energy strategies
- Market entry strategies
- PPA Advisory

- Development support
- M&A support
- Project management
- Wind measurements and Energy Yield Assessment
- CFD modeling and simulations
- Feasibility
- Basic design
- Permitting
- Environmental studies
- Grid studies and power system integration
- Technical specifications
- Tendering
- Contracting
- Financing support

- Design review
- Site supervision
- Testing
- Commissioning
- Connection to transmission network
- Contracts and loan management

- Asset management
- Operational excellence
- Production analysis
- Maintenance
- HSE plans
- Energy sales



# International

We are global as well as local – we understand both the global technology trends and the local aspects. Our service packages and international project teams are tailored to meet the specific needs of each project.

We provide our services in compliance with the best international practices and standards as well as fulfilling local authority requirements and design codes.

# Experienced

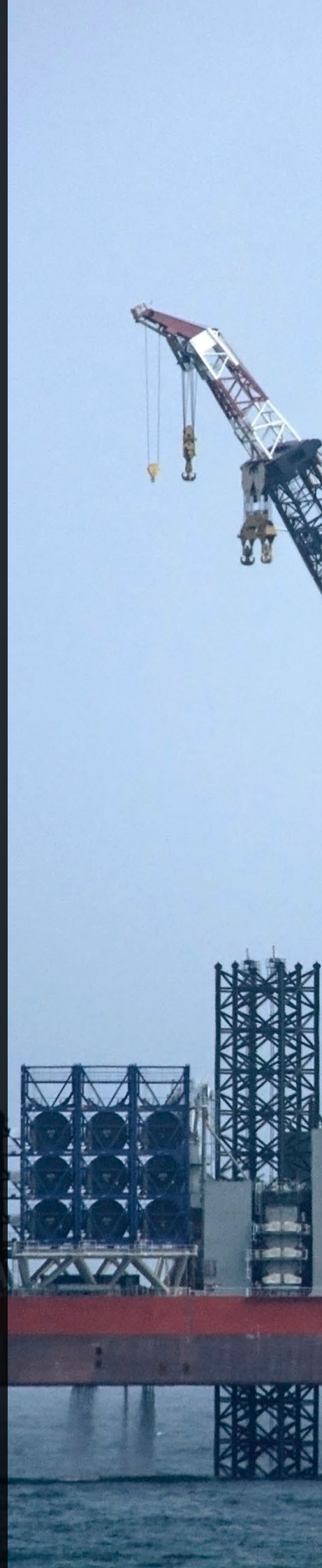
For more than 30 years, AFRY has been actively involved in numerous wind power projects around the world. AFRY'S dedicated team of wind experts have cutting-edge engineering and technology expertise to serve clients throughout the entire value chain and project lifecycle.

Many of our clients want to keep us close by, as their trusted advisor from the early stages of market entry, identifying target sites, and all the way through the development and pre-construction phases to project completion and commercial operation.

# Innovative

We are at our best when working on pioneering projects – whether facing technical challenges, emerging markets, or providing front runner financing solutions. In several countries, we have supported the construction of first utility-scale wind farm projects, first applications of the latest turbine technology, or closing of first international Project Finance transactions.

We understand the big picture of Energy Transition and the role that wind energy will play as enabler of cross-sectoral emission reductions and in achieving a carbon neutral economy. We are involved in a number of innovative development projects involving hybrid power production, energy storage, smart grids, e-mobility, green hydrogen production, and Power-to-X schemes.







250+

wind power experts

80+

offshore wind power  
dedicated experts



# Some of our recent success stories

AFRY is dedicated to advancing the wind power industry and has actively participated in wind projects globally totalling over 150 GW. Our engagement includes serving as Technical Advisor and Owner's Engineer for at least 70 GW and providing Commercial/Market Advisory for more than 90 GW.

## Over 20 GW pipeline of onshore and offshore wind projects in several European markets (2020)

Buyer's Commercial and Technical Advisor at 30% stake disposal of a leading international wind project development and construction company.

## 1.1 GW Seagreen 1 Offshore Wind Farm in Scotland (2020)

Buyer's Commercial and Market Advisor at 49% stake disposal and financial closing.

## 650 MW Wind Farm project in Northern Sweden (2006–2021)

Prefeasibility and feasibility studies, Buyer's Technical Due Diligence, Construction Management, HSE Management. Europe's biggest onshore wind power project built to date.

## A pipeline of three wind farms totaling 144 MW in Vietnam (2020–ongoing)

Lender's Technical Advisor including Technical Due Diligence, construction and commissioning monitoring, and annual O&M monitoring throughout the loan period. The first wind farms in Vietnam to be built on international non-recourse project finance basis.

## 600 MW onshore wind project portfolio in Turkey (2020)

Technical Due Diligence, assessment of expected remaining lifetime, developing options for measures to enhance remaining lifetime. One of the largest renewable energy portfolios in Turkey.

## 126 MW Had Kang Han Wind Farm and 260 MW Hanuman Wind Farm in Thailand (2013–2019)

Technical Advisor for EPC and WTG bidding and contracting, Owner's Engineer during construction. The projects are among the biggest wind farms in operation in South East Asia.

## 738 MW Alto Setão III Wind Farm in Brazil (2014–2015)

Full Project Management service package including permit and license management, budget and contract administration, engineering design review, and site supervision during construction and commissioning. This is currently Brazil's largest wind farm project.

# Our clients

We have successfully provided our services internationally to banks, project developers, power utilities and grid operators, turbine suppliers, land owners, investment funds, government agencies, research institutes, municipalities, regional governments, industrial companies and private investors.

We maintain successful relationships, lasting over decades, with many of our clients.

# 30+

years of experience  
in Wind power





AFRY provides engineering, design, digital and advisory services to accelerate the transition towards a sustainable society.

We are 19,000 devoted experts in industry, energy and infrastructure sectors, creating impact for generations to come. AFRY has Nordic roots with a global reach, net sales of 27 BSEK and is listed on Nasdaq Stockholm.

Making Future

Our wind power professionals, market and commercial experts, environmental specialists, and experienced project management organisations on 6 continents, work together as coordinated regional teams and are able to support your wind energy business no matter where your projects are located.