Experts in
Wind Energy

Experienced, responsive consultants
Expertise that spans the wind industry
Decades of real world experience in project development
EAPC Wind Energy has provided wind engineering and consulting services on more than 30,000 MW of wind farm development throughout North America, South America, North Africa, and Europe.
We provide a wide range of wind energy consulting services to wind developers both large and small. Some of the sectors we cover are:

Financial Institutions
Electric Utilities
Communities
Economic Development Groups
Universities, High Schools
Industrial Plants
Native American Tribes

Our services include:

Site Prospecting
Feasibility Studies
Met Tower Siting and Installation
Wind Resource and Energy Assessment
Data Collection and Analysis
Wind Farm Design
Wind Turbine Array Analysis
Site Suitability Studies
Technology Assessment

We also provide due diligence services to assist with:

Financial analysis, development and strategy consulting services, and expert witness testimony in permitting hearings
Energy Assessment and Feasibility Studies

Wind Resource and Energy Assessment
From wind prospecting and preliminary assessments to comprehensive and detailed “bankable” reports—we provide it all. We use a variety of sophisticated computer tools to perform wind resource and energy assessments, including WindPRO, WASP, and Meteodyn WT. We have experience in all types of terrain, from simple to complex.

We provide wind farm energy production estimates which incorporate specific wind turbine power curves with the site-specific terrain features, wind data, array losses and other energy losses to provide the best possible central estimate (P50) of energy production for project and financial planning purposes.

Uncertainty Analysis
By identifying and quantifying the various sources of error that are inherent in the energy production estimate, we provide our clients with valuable information regarding the upper and lower confidence limits (ie. P90, P95, etc.) associated with the central estimate (P50) of annual energy production.

Wind Farm Design and Optimization
Relying on wind data and the results of geographic, environmental and infrastructure studies, we identify the optimal location for a wind farm, and then use powerful modeling software and years of industry experience to optimally site the individual wind turbines to maximize energy output and minimize the wind loading on the turbine components.

Environmental and Constraint Studies
We screen projects for possible fatal flaws that developers benefit from discovering early on in the process.

Noise, Shadow Flicker, Viewshed, and Visual Simulations
Our detailed studies help developers, communities, and regulators understand a project’s potential impact on the surrounding community.

Microwave, Communications, and FAA
We have the capability to provide detailed modeling of potential interference with microwave beam paths or obstruction to air navigation.

Constructability Analysis
Our early review of terrain, soil type, erosion concerns, and site accessibility saves time and money during permitting and construction.

Met Tower Sales and Installation
Our highly professional full-time crews, operating from offices in the Northeastern and Midwestern United States, have installed, commissioned and serviced hundreds of met masts over the course of the last two decades. Our crews are experienced at installing masts in even the most challenging terrain. Our tower configuration and commissioning documentation is among the most comprehensive in the industry.

Wind Data Collection and Monitoring
We provide data collection, monitoring and reporting services to many of our clients. We help them achieve a high rate of data recovery, alerting them when a met mast is in need of inspection or repair. We deploy our crews when necessary to correct the situation in a timely manner.
Experience
We have more than 30,000 MW of wind resource assessment and development experience across North America, South America, North Africa, and Europe with a 100-member staff of developers, engineers, meteorologists, technicians and analysts.

Rigorous wind resource assessment and project feasibility studies
We consider them a vital step in project development and the best way to obtain a realistic understanding of a project’s potential, long before significant funds are committed.

Real world experience
The guidance we provide to our clients is always grounded in a practical knowledge of what it takes to develop a wind project, not the theoretical. We’ve been in the field. We’ve negotiated with landowners and navigated complex permitting requirements. We know the realities and the frustrations.

Versatility
We’ve conducted detailed technical due diligence on entire portfolios for leading financial institutions and we’ve guided first-time developers who are exploring their first projects. In every case, we patiently tailor our approach to a client’s needs and level of experience.

Bankable practices
The requirements imposed by project investors and lenders vary, but our consultants always have an eye toward the day when a project will seek financing. From the first met mast we erect for a new project, we have that day in mind.
Development Consulting
For landowners and project developers, our reliable and creative leadership move projects through development strategy, land control and lease negotiations, permitting, interconnection, construction, and dozens of other considerations.

Contract Negotiation and Review
For years, we’ve negotiated and reviewed turbine supply agreements, EPC contracts, landowner leases, and O&M agreements, drawing upon knowledge that only comes with real world experience.

Technical Due Diligence
Some of the largest project lenders and equity participants in the nation rely upon us as independent engineers and technical experts to maximize profit and minimize risk.

Financial and Economic Analysis
Our team helps clients understand project capital and operating costs, financing structures and power pricing through detailed economic models. We match projects in need of funding with investors eager to put their money to work.

Balance of Plant Design and Engineering
Our civil, electrical, and mechanical engineering staff carries out turbine foundation and electrical collection system design. Involving our engineering staff early in the development process means we avoid the pitfalls that add to construction costs later.

Strategy Consulting
As technology evolves, policy and tax incentives change, and new markets develop, we shape strategies for clients confronting a changing landscape. That work includes comprehensive market research, supply chain analysis, and assessment of new technology.