

Introduction to Wind Energy Technology, current status and Prospects of Wind energy Market in Europe and in the world. Meteorological elements of wind. Wind energy potential. Types and subsystems of wind turbines. Aerodynamic design of horizontal and vertical axis wind turbines. Static and dynamic loading of wind turbines. Electrical motors for wind turbines and their cooperation with the grid. Site selection of wind turbine installations. Analysis of aerodynamic performance and optimized design of wind farms. Practical elements for wind turbine selection. Applications. Economics of wind turbines.