

WindPRO Course Estonia 2001 (language: UK)

Tuesday, 23 October 2001

WindPRO BASIS and Environment

WindPRO is a complete software suite for designing and planning of WTG projects. It is the most used software for wind projecting with more than 400 users worldwide. WindPRO is developed in Denmark, where installation of more than 6.000 WTGs during the last 2 decades has been an important basis for developing the software tool.

This first course day (of 3 consecutive days) is designed for wind farm developers, consultants, local authorities and universities who are in contact with WTG designing, and who wish to get familiar with the basic knowledge needed for using the WindPRO software in their work or evaluating the calculations and documentation made with WindPRO.

09.00 – 12.30

- General introduction to the theory behind Wind Turbine Generators (WTG's)
- Introduction to WindPRO (overview and philosophy)
- Coordinate systems and attachment of maps
- Designing with WindPRO – basic features
- Calculation, printing and reports

12.30 – 13.30 LUNCH

13.30 - 14.30

- Introduction to Danish experiences, economy, grid connection, ownership of a WTG, official treatment of an application for the erection of a WTG or a windfarm

This session focuses on environmental documentation of WTG projects. With WindPRO most of the work needed to examine the environmental impact of a WTG project can be made simply and efficiently.

14.30 - 17.00

- DECIBEL (Noise calculations)
- SHADOW (Shadow flickering calculations)
- VISUALISATION (Photomontage)

During the day there will be served refreshments

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Wednesday, October 24, 2001

09.00 – 12.30

- Brief summary of Tuesdays program
- Hands-on exercises in creating a project and attaching maps
- Hands-on exercises in noise and flickering calculations
- Hands-on exercises in visualisation

12.30 – 13.30 LUNCH

WindPRO ENERGY Calculation

The rest of the course will focus on the subject energy calculation and site assessment, which is given a detailed introduction, since this is the foundation for the success of any WTG project which also illustrates many of the efficient features in the software.

13.30 – 15.30

- Basic terms in energy calculation (The Wind Atlas Methodology)
- Evaluation of terrain – site assessment
- Terrain classification (roughness classification, height contours and local obstacles)

15.30 -17.00

- Hands-on exercise in terrain classification

During the day there will be served refreshments

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Thursday, October 25 , 2001

WindPRO ENERGY Calculation (continued)

09.00 – 11.00

- Brief summary of Wednesdays program
- Handling of measured data
- Establishment of a Wind statistic
- Energy calculation

11.00 – 12.30

- Hands-on exercise in measured data, calculating a Wind statistic and energy calculation

12.30 – 13.30 LUNCH

13.30 – 14.30

- Hands-on exercise in measured data, calculating a Wind statistic and energy calculation (continued)

14.30 - 16.00

- Layout of WindFarms
- Establishment of wind resource map
- Optimisation

16.00 – 17.00

- Presentation of the Wind Atlas of Latvia. The preliminary report and the data, which the Atlas is based on, will be handed out.

During the day there will be served refreshments