

MODULE 4**Introductory video to Wind Energy for Local Development****Energy online course (Module 4, part 1)****Videoscript**

Hello,

I am Roxana Margareta Grigore from „Vasile Alecsandri” University of Bacau. I work in the Power Engineering and Information Technology Department of this university. I will try to be with you throughout Chapter 1, to introduce you in technical aspects about the production of electricity from wind energy.

Wind is a clean energy source, free and inexhaustible. That is why, wind power has been used by humans for thousands of years.

The field of wind energy conversion systems is vast. Most national programs are devoted to large-scale applications of wind turbines for supplied electricity to a public network. However, at the same time, there are decentralized applications of wind energy conversion (a each household should have its own turbine, possibly combined with solar and / or a biogas system), especially in rural areas.

Module 4 is refers specially to wind energy aplicable for a household in rural areas. At the begining, there are presented historical data of wind energy use, the evolution in time of wind turbines, basic constructive configurations of turbines with the principal elements components.

After, there are shown types of wind turbines which are applicable for rural areas. and small wind electric systems used for different applications.

Finally, the necessary steps for sizing a wind turbine installation for a dwelling from the rural area are presented. The dimensioning of each installation component, based on the adequate equation is shown, too.

I hope that the information presented will be interesting for you and I hope you enjoy these contents.

My colleague Gabriel Petru Puiu will presented next four chapters from module 4.

I wiss you succes and see you soon!