

Open Educational Resources for online course "Renewable energy for local development"



Information about the Module 1 of the course: "Introduction to Renewable energy for local development"

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Aim: This introductory module is aimed at providing students a general idea and some basic knowledge regarding both renewable energies and rural environment. The main goal would be to offer information enough so as to allow them to course the rest of modules, more technical and specifically focused on the various technologies, having clear the current framework in both sectors (renewable energies and rural environment) and how they can interact.

Parts:

- Chapter 1: First steps into renewable energies
 - 1.1. The renewable resources: sun, wind, biomass.
 - 1.2. Renewable energies along the history.
 - 1.3. The distributed generation, a new electric power system paradigm.
- Chapter 2: The renewable energies panorama
 - 2.1. Economic situation of energy and electricity around Europe
 - 2.2. Renewable energy situation around Europe
 - 2.3. Influence of the regulatory framework on the current panorama.
- Chapter 3: The renewable energies technology
 - 3.1 Basic technological introduction the renewable systems.
 - 3.2 Energy storage systems as a key factor for renewable energies.
- Chapter 4: Development in rural areas
 - 4.1. Introduction to the rural development
 - 4.2. Differential aspects of development in rural areas.
 - 4.3. Social sustainability and development. Living and working in rural areas.
- Chapter 5: How initiatives can promote social sustainability of rural areas
 - 5.1. Considering actors, factors and agents.
 - 5.2. Renewables as an opportunity for social sustainability and development in rural areas.
 - 5.3. European financing for Renewable Energy and Rural Development

Description of the parts

The first three chapters of this module will be devoted to introduce the renewable energy resources availability, to present the current panorama and a basic technological description of these energies focused on small installations, and finally to describe the different regulatory frameworks that can be found on the different European regions and States.

The last two chapters provide students of an overview about rural areas, also to break some current stereotypes that are held nowadays. Furthermore, students can include social complexity in order to achieve successful and sustainable projects suitable to develop rural spaces.

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Start here

After logging in, please download the text and get an overview of the module by reading the introducing summaries at the beginning of each subchapter. Like that, you can get a general idea of the content. Also note that a Section 6 has been introduced in each module in which students will find interesting files with complementary information.

Forum

When you have finished a chapter, please go to the 'Forum' to see your Tutor's question connected to that chapter. As you are expected to participate in 80% of the discussions to complete the course, and because the material is divided into 5 chapters, you will have to participate in at least 4 forums.

If you have any questions regarding the material, you can ask them in the 'Questions and Answers'.

Online tutorial sessions

This is the official name of the chat. So if you need help to understand anything regarding the contents introduced in the documents, do not hesitate to write a message, and you will get a reply immediately.

Every week, you can chat one hour to the professors and they will reply you. For Romanian students, it is from 16:30 to 17:30.

Professor Héctor Beltran will attend you the first two weeks with questions regarding chapters 1, 2 and 3. The exact days and hours are: 3th and 10th of March from 10:00 to 11:00 for spanish and hungarian students, one hour later for romanian students

Professor Vicent A. Querol will attend you the last two weeks with questions regarding chapters 4 and 5. The exact days and hours are: 15th and 22th of March from 15:30 to 16:30 for spanish and hungarian students, one hour later for romanian students.

List of Acronyms

Given the big number of acronyms used in the documents presented in this first module, a list of acronyms list has been uploaded in Chapter 6 of the module Moodle platform. Documents in this section will be available for you for permanent use. So, you will be able to look up any unknown acronym at any moment.

How to learn the material and pass the modules?

After getting familiar with the module context and contents, read the texts one by one *carefully*, and work them. You can expand your knowledge or learning by following and reading the multiple links provided in the "references section" of the various documents. Also along the text, one can find links and images that can be tracked for further information. It is quite important to follow the original order of the material, because it has not been drawn up randomly.

Once you feel prepared, go to the questionnaire of the chapter (there are five tests in the module) and try to respond the test. It is a multi-response test with up to four different options in which only one of them is correct. Most of the answers can be straight found in the text of the files provided in the module. However, some of them may need a light research through the links and sources of information cited in the documents.

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Assessment

Students can only obtain the certificate of the course (including the 4 modules) if the following conditions are fulfilled:

- They have obtained 60% of mark in all chapters of the 4 modules
- They participate in at least 80% of the debates proposed in the forums
- They have fully and individually developed a study case combining rural development (module 1) and one of the modules 2, 3 or 4, and this has a positive evaluation from the teachers involved.
 - The possible study cases to be developed will be presented to the students in Modules 2, 3 and 4. Students can also propose a potential study case to the teachers, and wait for their acceptance as case study.
 - Each study case will be supervised by the teachers teaching their corresponding module (2, 3, 4) and module 1 (for the part of rural development).
 - The study case will be developed by the students the last 3 weeks of June 2016.
 - The student will have to present to the corresponding teacher his work on the case study at the middle of those 3 weeks, so that the teacher can give guidelines and propose improvements to be implemented.

The result indicated on your certificate of the course "Renewable energy for local development" (that includes the 4 modules) will be based on the score you achieve:

0-59% Fail 60-69% Good 70-79% Very good 80-100% Excellent

If you have technical difficulties with the learning platform, you can contact the course administrator, Mr Zoltán Futó at futosoltan@karolyrobert.hu.

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