IN2RURAL

INnovative Practices in Renewable Energies to Improve RURAL Employability

Newsletter nº2, December 2015

CONTENT

RENEWABLE ENERGIES AND EDUCATION LEVEL

The renewable energy is defined as energy that is collected from resources which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat.

(Omar Ellabban, 2014)

FOCUS GROUP IN CASTELLON

In Castellon we performed a focus with representatives of different actors to know what is the perspective in the area of renewable energy in relation to rural areas. Here we report a summary of the main conclusions.

The general feeling among respondents is that renewable energies play an important role in rural development, but it is clearly below the expected potential. In this sense, biomass is the technology that raises more interest and in which it is seen a great untapped potential. However, the solar technology remains the best known. Finally, the wind technology is considered more suitable for high power installations, considering it unattractive to self-sufficiency.

On the other hand, most participants believe that small plants are more beneficial to rural areas because they settle down more population, create more economic dynamism in the area and cause less impact, while larger facilities, usually conducted by large companies, contribute less to rural development. However, there are some dissenting opinions, claiming that larger facilities create more jobs.

All the respondents agreed that, in the future, renewables could be a good complement for encouraging the rural development.

From the responses, we can understand the economic situation of the interviewees currently residing in rural areas, which is essential to know what kind of businesses or jobs can be created in the future. Some of the possibilities are: biomass energy cooperatives; companies related to the installation of boilers, solar panels or collectors and technicians to maintain them; companies related to the management and use of forests for biomass; companies involved in metal structures for solar panels or masonry; public companies to take charge of the collection and energy recovery of waste for biomass or biogas; technology companies related to renewable energies and pellet mills.

SURVEY CONCLUSIONS IN GYÖNGYÖS

The situation in rural areas in the vicinity of Gyöngyös is unfavourable for a number of reasons including ageing and negative demographic tendencies. Unfortunately, no positive changes can be expected in the near future unless international companies such as Apollo Tyres settle down in the region. Some of the problems are that the situation of the middle classes is not improving, the population is divided into the rich and the poor and some districts show appalling circumstances.

In order to improve the living standard of the population, suitable jobs must be created. More jobs were available earlier in the food industry and it would be expedient to have innovative workplaces. Furthermore, more dynamic cooperation between higher education institutions and the companies – perhaps with state support – would be utterly beneficial.

The role currently played by renewable energy in the rural development is influenced by low crude oil prices which block development possibilities and as a result at present there is no significant improvement. Again the state should have a more substantial role in this respect owing to climate change. Hungary's short and medium term EU commitments are feasible, but renewable energy sources cannot satisfy national demand, and thus nuclear power stations

Co-funded by the Erasmus+ Programme of the European Union

seem to be a must.

It must be emphasized that in rural areas the extension of the green economy would be of highest importance and there is a definite demand for renewable energy sources. Hungary can be most successful in geothermal energy utilisation. The fact hydro energy is neglected causes serious hindrances for our country.

Renewable energy could contribute to activate rural development if energy generation that is suitable for local endowments is treated in a complex way. Renewable energy sources might have a role in social services, in the green industry, in public work, and in local energy production, all of which can create jobs.

A number of higher education institutions, including Károly Róbert College, offer courses in rural development which also deal with renewable energy as part of the curricula. Nonetheless, more courses should be offered as the currently available ones cannot satisfy demand created by companies operating in renewable energy and government support is inevitable for new courses.

Interview with Professor Sándor Marselek

BACAU COUNTY AND RES

In Bacau County, approximately 55% of the population lives in rural areas. This population is generally older, young people leaving to work abroad. The employment rate is low, as fewer qualified people and fewer companies being present in rural areas. The main economic activities are agriculture and livestock.

Local authorities are concerned with improving infrastructure and population's employment through the diversification of economic activities. In order to improve the social-economic situation, initiatives and events are required and this fact would ultimately lead to major legislative changes, which seek to encourage and stimulate investments in education and to enhance public confidence in state authorities.

There is no consistent demand of renewable energy in rural communities. The ones with initiatives in this area are the private investors and the local authorities.

The local authorities have developed photovoltaic systems of public lighting and biomass boilers. The private investors have developed wind farms that have registered a rapid growth followed by stagnation and even decrease in the number of turbines and installed power.

Street lightning in Margineni

A latent potential is the young people who could return with capital and a new vision of rural areas. Hence, the opportunity of family associations or community associations for the implementation of renewable energy that brings the benefits derived from them (developing infrastructure, increasing employment, increasing revenues to the local budget, protecting the environment), but with some disadvantages as well (land removal from the agricultural circuit).

MULTIPLIER EVENTS

CASTELLON PROVINCE

The Universitat Jaume I developed two multipliers events aimed at making known the possibilities of using renewable energy in rural areas with practical examples developed in the province of Castellon. These activities included: a seminar in Segorbe (21st October, 2015) and the organization of the First Fair of Renewable Energies in Atzeneta (31st October, 2015).

Both Atzeneta and Segorbe events unveiled the Erasmus + IN2RURAL project coordinated by Universitat Jaume I, in which universities and SMEs from Romania, Hungary and Spain are involved. In addition, issues such as legal aspects of the regulation of renewable energy and the exposure of success stories in the province

Co-funded by the
Erasmus+ Programme
of the European Union

of Castellón (solar, wind, biomass, etc.) were discussed. Furthermore, an exhibition, educational workshops and shows of companies were organized in Azteneta.

Multiplier event in Segorbe


Multiplier event in Azteneta

EGER

On 30th October 2015 a multiplier workshop was held in Eger (Hungary, the seat of Heves County) at the seat of the Agria Geográfia Foundation. The Foundation is a NGO which was founded in 2009, and its activities are aiming to promote the spread of innovative methods of regional development. One main field of interest of her members is the realm of renewable energy and energy efficiency. Many of their former activities concentrated on the research of the social background of renewable energy harvest. A virtual network of varied social partners was formed around the Foundation functioning as a multifunctional hub of social innovations in the Eger Region.

In connection with the "Innovative Practices in Renewable Energies to Improve Rural Employability" (IN2RURAL) project, members of the fore-mentioned network (NGOs, entrepreneurs, municipalities and university students) were informed by Dr. Zoltán Bujdosó (Károly Róbert College, Gyöngyös). Dr. Bujdosó as a keynote speaker informed the audience of the event about the recent status of the project, the future tasks and the possibilities of partnership in the implementation. Much attention was paid to the education and training opportunities for students of higher education in the IN2RURAL project.


Multiplier event in Gyongyos

Dániel Krámos an expert of renewable energy-based regionalization delivered a short presentation about the situation of renewable energy harvest in Heves County. Beyond the analysis of the recent capacities he dwelled long upon the planning process of the 2014-2020 regional development period.

The last presentation was held by Dr. Csaba Patkós – a contributor from Geolin Co. about existing best practices of the integration of rural development and renewable energy.

BACAU COUNTY

"Vasile Alecsandrii" University of Bacau organized two multipliers events to promote the use of renewable energy in rural areas, which were attended by representatives of local agencies, local authorities and business environment.

The first event was held in the "Vasile Alecsandri" University Aula on 28th October 2015. The second event (30th October 2015) was hosted by Bacau County Council, a supporter of the projects developed by the University. The projects implemented in rural areas regarding the renewable energy and possibilities of funding it were the main topics of these events. Eng. Florin Andronescu, director of Alba Local Energy Agency, presented a pilot project for Pianu village, Alba County. The project is about of a sheepfold

Multiplier event in Bacau

Co-funded by the Erasmus+ Programme of the European Union

supplied from renewable combined sources: wind and photovoltaic. The implementation of ANERGO, the first observatory of energy in Romania – an instrument dedicated to support local authorities for the sustainable energy planning, was greeted as well.

IMPLEMENTATION OF RES IN RURAL AREA

CASTELLON PROVINCE

The country house of Noguera is an isolated house in the mountains. It is a center for environmental education where groups of adults and children stay and learn to live with renewables.

In this place, we can see a solar energy system to generate electricity and hot water, a mini wind system to generate electricity, biomass for heating and mini hydraulic system to increase the electrical power.


Photovoltaic plant in Mas de Noguera

EGER

The biggest problems are usually the financial difficulties. Another important question is the utilization of lower quality lands.

The current support scheme encourages farming on higher quality lands – this means that other, less productive areas are left waste. In Hungary this accounts for an unacceptable waste of ca 600,000 hectares (200,000 ha of arable land under 17AK and 400,000 ha of high quality pasture). Due to their high expenditure ratio and exposure to weather, these lands are less ideal for farming, but could be used for producing energy crops. Such experiments took place earlier at Karoly Robert College: one example is the biomass heating plant at


Biomass culture in Gyongyos

Atkár-Tass Puszta harvesting of biomass plants.

BACAU COUNTY

Most projects using renewable energy in rural areas of Bacau consist in achieving photovoltaic street lighting. One of the biggest projects in this field is the system of public lighting of Margineni village, comprising 1606 independent poles.

The project was funded by the European Regional Development Fund (ERDF) - Operation 4.2 „Supporting investments in upgrading and building new capacity for producing electricity and heat through renewable energy resources: biomass, hydropower resources (in units with installed capacity less than 10 MW), solar wind, biofuels, geothermal and other renewable energy resources".


Margineni Hall

http://www.in2rural.ub.ro/
https://www.facebook.com/in2rural

Co-funded by the
Erasmus+ Programme
of the European Union