

PLANS AND PROJECTS IMPLEMENTATION EVOLUTION IN RENEWABLE ENERGIES AREA AT WEST REGION LEVEL

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Abstract

The paper presents the plans and projects implementation way in renewable energies area, in 2011-2013, at west region level, especially those that have the realization of photovoltaic parks as object and correlation of those with the targets that has to be accomplished by Romania as European Union state. Plans and programs must be according to 2001/77/CE Directive that has as transposition in national legislation the following legislation and strategies: Romania Energetic Strategy, Government Decision no. 443/2003, Government Decision no. 958/2005, Government Decision no. 1069/2007. The main objective of these legislations is to approach a significant percentage of electric energy from renewable energy, in this case, electric energy production with the help of solar energy captured with the help of photovoltaic panels. For this the main objective will be achieved through a low cost, in what it regards the need of energy, in short, medium and long term. Plans and projects in this area are approved in environmental notice phase, environmental agreement, environmental authorization, by Environmental Protection Agencies. Public involving in taking environmental final decision is very important.

Key words: renewable energy, plans, programs, electric energy.

INTRODUCTION

In the last years, first place in terms of greenhouse gases producers has been presented the energetic sector. Worldwide, if it does not increase the number of projects implementing electric energy creation from renewable energies, then greenhouse gases percentage will increase to 55% till 2030 year.

According to Government Decision no. 1069/2007 „general objective of energetic sector strategy is to comply with the energy need, in present and also in medium and long term, at a low cost, adequated to a modern market economy and to a civilised life standard, in quality conditions, food safety, according to sustainable development principles”.

In Romania and European Union actual reglementations has established orientate targets to achieve electric energy from renewable resources, namely 35% till the end of 2015 and 38% for 2020 year.

Priortary objectives of energetic area development, in sustainable development network are presented:

- Clean technologies utilization to reduce the impact on environment;
- Biogas utilization, geothermal energy, liquid biofuels;
- Investments promotion in this field;
- Research-development promotion in this field.

MATERIAL AND METHODS

The used material and methods to realize this paper are from specific national legislation: Government Decision no. 1076/2004 that standardize environmental notice for plans and programmers, Order no. 135/2010 for approving the application methodology of impact evaluation for public or private projects, Order no. 19/2010 for approving the environmental

adequate evaluation methodology and Order no. 1798/2007 for approving the issuance procedure to release the environment authorization.

RESULTS AND DISCUSSIONS

Regulatory procedure evolution in the renewable energy field for the plans/programs is given by the following stages:

1. Environment permit phase: including the objectives in the urban planning area
2. Environment agreement phase: permission to build
3. Environment authorization phase: permission to work, to produce electric energy from renewable sources

1. In the first phase are made the following steps:

- Plan/program integration in the specific legislation
- Adequate assessment and environment report elaboration
- Quality analysis of the environmental report and decision making

Achieving adequate assessment is specific for plans/programs that are in the perimeter of the protected areas/Natura 2000 sites. This will analyze the impact of the plan/program on biodiversity, in this regard will be made:

- An analysis of livestock species and habitats of Community interests on those perimeter beam;
- An estimate of the impact on species and habitats of Community interests, it will be estimated for both plan or program and cumulatively with other plans/programs in the vicinity of the protected area.

Environmental assessment shows besides plan/program objectives, environment evolution if its implementation, correlating plan/program objectives with those of national, international, community, potential significant effects of the plan on the environment and an action plan for monitoring the effects significant environmental.

Decision on issuing the environmental plans and programs take environmental protection agency in collaboration with the working group made up of public institutions which issue opinions during the procedure and the general public through public announcements in mass-media and public debate.

In the Region 5 West number plans/programs in the production of energy from renewable sources was distributed as follows:

- in the year 2013
 - Timis county : 12
 - Arad county: 0
 - Caras-Severin county : 0
 - Hunedoara county: 3
- in the year 2012
 - Timis county: 8
 - Arad county: 2
 - Caras-Severin county : 0
 - Hunedoara county: 0
- in the year 2011
 - Timis county: 0
 - Arad county: 0
 - Caras-Severin county: 0
 - Hunedoara county: 0

Graphical representation of the evolution of plans/programs for 2011-2013 in Region 5 West, specifically the counties of Timis, Arad, Caras-Severin and Hunedoara is shown in the fig. no. 1.

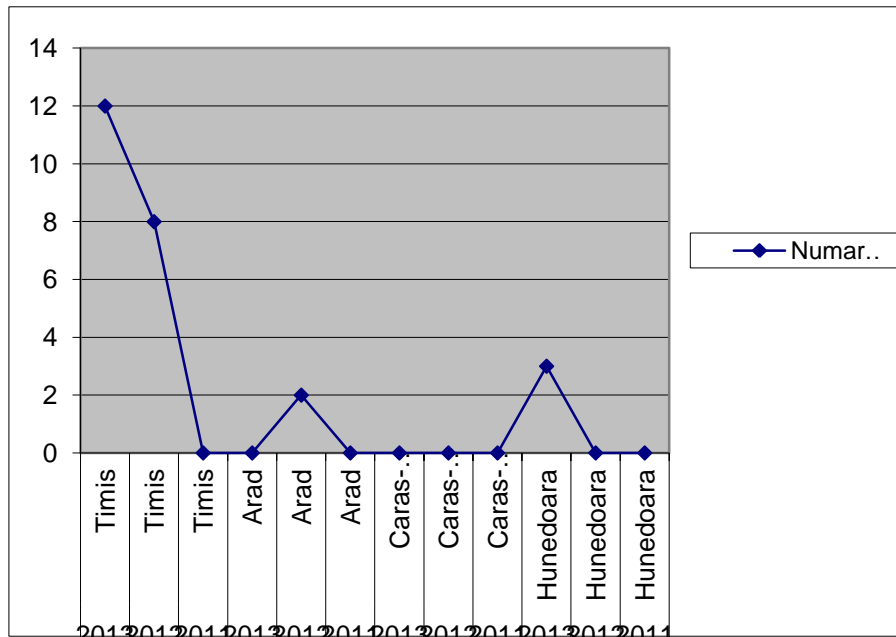


Fig. no. 1 Graphical representation of the evolution of plans for 2011-2013 at Region 5 West

It is found that the best represented county in the Region in terms of plans that concern obtaining electricity from renewable sources is Timis (year 2013) and the weakest county from region is Caras-Severin (with no plan in the area).

After inclusion in the Urban Area Plan will target stage of obtaining the building permit which is based on environmental agreement.

In this phase the projects are included in environmental legislation and if there are located in a protected area will go through proper evaluation stage (adequate assessment) for analyzing the impact on biodiversity of the area.

And at this stage the general public near public institutions has an important role in environmental decision-making.

Custodian protected area regardless of the stage traveled holder, will issue the opinion with conditions. This notice is required by law.

In terms of number of projects from the renewable energy field in the region 5 West the situation is as follow:

- in the year 2013
 - Timis county: 86
 - Arad county: 4
 - Caras-Severin county: 5
 - Hunedoara county: 1
- in the year 2012

- Timis county: 21
- Arad county: 0
- Caras-Severin county: 5
- Hunedoara county: 2
- In the year 2011
 - Timis county: 0
 - Arad county: 0
 - Caras-Severin county: 0
 - Hunedoara county: 0

Graphical representation of the evolution of projects for 2011-2013 in Region 5 West, specifically the counties of Timis, Arad, Caras-Severin and Hunedoara is shown in the fig. no. 2.

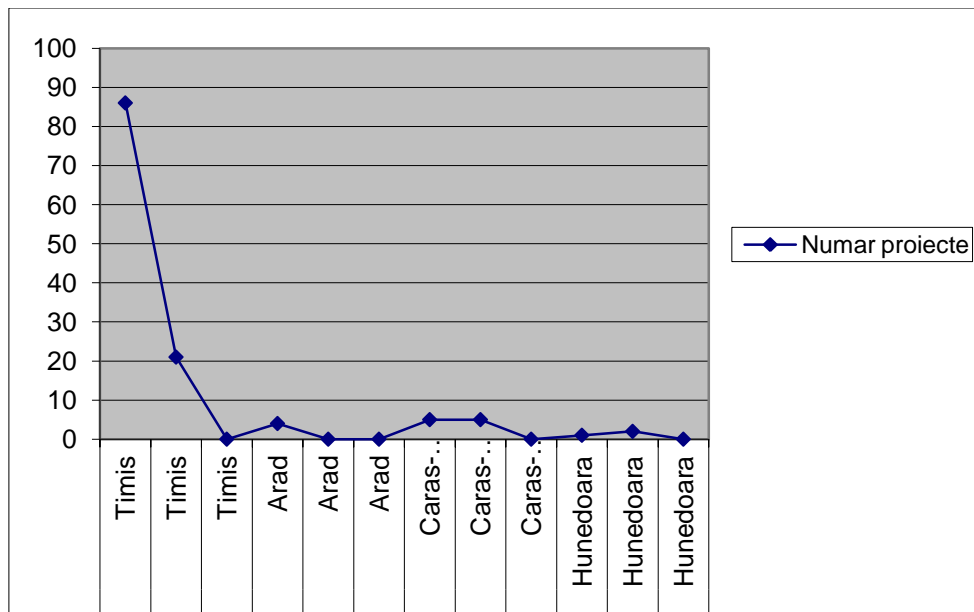


Fig. no. 2. Graphical representation of the evolution of projects for 2011-2013 at Region 5 West

From the graphic result that the Timis County is best represented from the region and the weakest county is this time Hunedoara County.

After obtaining the building permit and realization of investment the next step is obtaining the environmental authorization for electricity production from renewable sources. This authorization is obtained in a code base (CAEN 3511-Electricity production). At this stage the public can be consulted in the decision making stage, by consulting the environmental protection agency website

In terms of the actual implementation of these photovoltaic parks in Region 5 West the situation is so:

- in the year 2013
 - Timis county: 10
 - Arad county: 0
 - Caras-Severin county: 0

- Hunedoara county: 0
- in the year 2012
 - Timis county: 2
 - Arad county: 0
 - Caras-Severin county: 0
 - Hunedoara county: 0
- in the year 2011
 - Timis county: 0
 - Arad county: 0
 - Caras-Severin county: 0
 - Hunedoara county: 0

Graphical representation of the evolution of investments for 2011-2013 in Region 5 West, specifically the counties of Timis, Arad, Caras-Severin and Hunedoara is shown in the fig. no. 3.

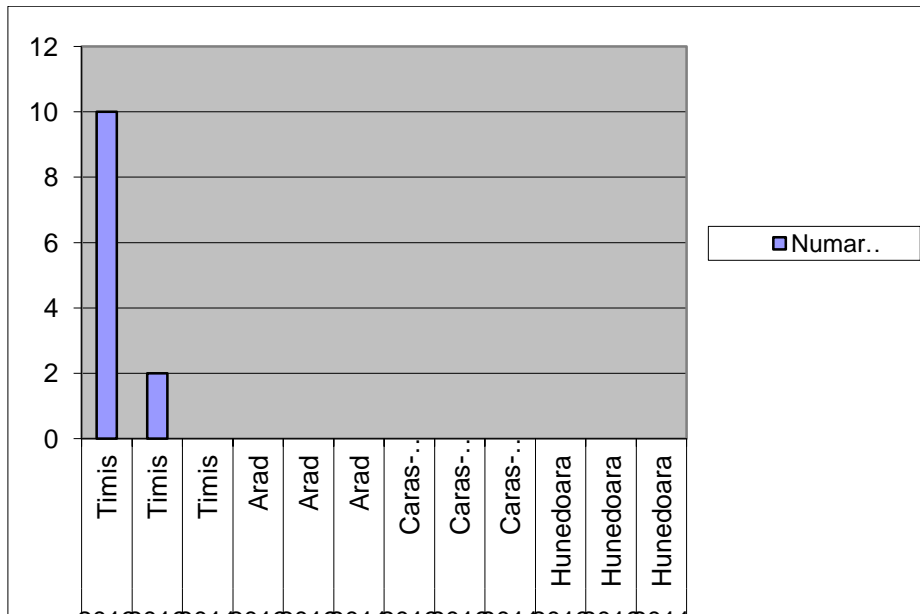


Fig. no. 3. Graphical representation of the evolution of investments for 2011-2013 at Region 5 West

In Region 5 West, Timis County, sits the best comparing with the others counties from the region. Perhaps some businesses have not yet completed constructions of photovoltaic parks and have not reached the stage of obtaining the environmental permit.

CONCLUSIONS

It was found that in the last three years, Timis County is the most developed in the field of renewable energy projects specifically aimed at getting energy from renewable resources.

This is possible both in terms of higher economic development of our county compared with other counties from region and the natural conditions (relief, climate).

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