SOUTH EAST EUROPE
Transnational Cooperation Programme

TERRE

TERritory, eneRgy & Employment

Programme co-funded by the EUROPEAN UNION

e-Newsletter

Fourth issue

November 2014.

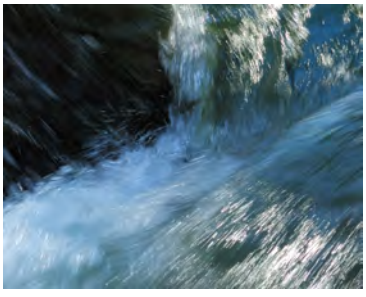
Content:

"For a greener future of rural area"

1. Introduction

The aim of the TERRE e-Newsletter is to inform the external audience, such as RES companies, public bodies, NGOs, local development agencies, local communities, farmers, breeders, wood companies and other key stakeholders about TERRE project activities, new initiatives, events and interesting case studies.

http://www.terre-project.eu



2. Strengths and weaknesses of the TERRE regions

This e-newsletter is based on Transnational comparison report prepared trough TERRE project by ERDF PP6 – EEE - European Centre for Renewable Energy. For additional information you can read a full report at:

http://www.terre-project.eu/en/download/

2.1. Overview RES potentials in the partner regions

Within the transnational report it was tried to demonstrate based on the existing data from the TERRE partner regions where the strengths and weaknesses on the different resources in the TERRE SEE territory are. The following picture shows the theoretical potential on the different resources in the single regions. The data have been prepared and the outliners have been straightened so that the picture is more significant.

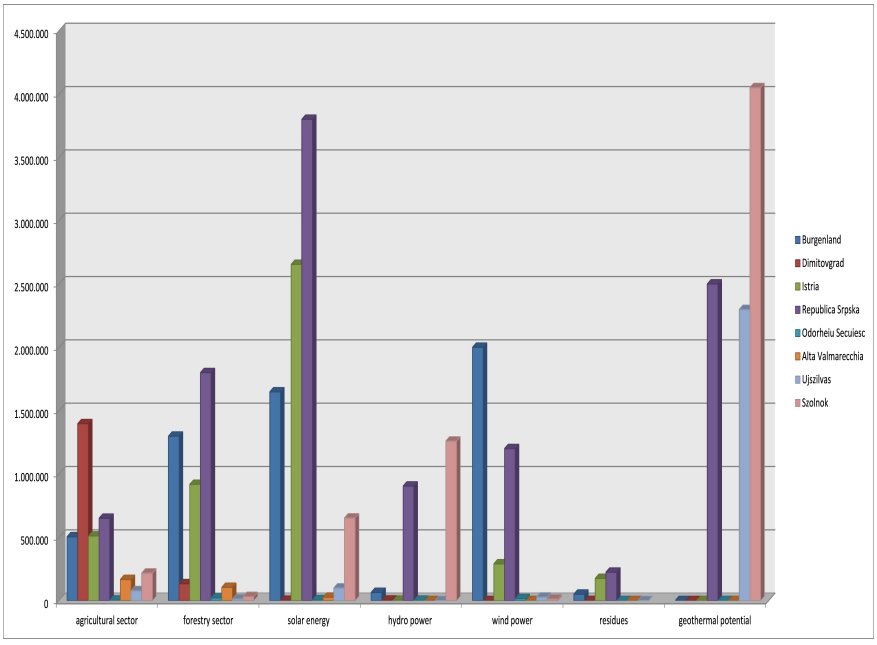
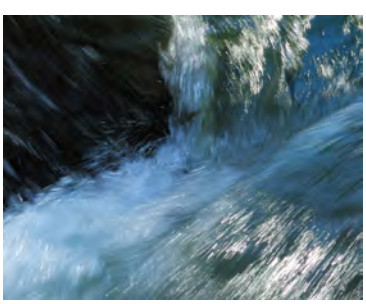


Figure 1: RES potentials in the partner regions
(source: prepared by ERDF PP6 – EEE - European Centre for Renewable Energy)

From the demonstration of the results it is visible that in the field of agriculture, forestry and solar energy nearly all partner territories have existing theoretical potentials. In all other sectors it is quite different. At first sight it now can be said that this three renewable sources represent the most important one when the regions think about using existing RES potentials of their territories. But the use of these potentials is dependent from a lot of factors that have to be taken into consideration for their future plans. Because first of all it has to be analyzed if it is possible to use the existing potentials and what is the legal situation behind. Because to be able to use renewable energy sources for energy production in a region it is necessary that the use of these resources gets supported and that the legal situation allows the efficient and sustainable use.





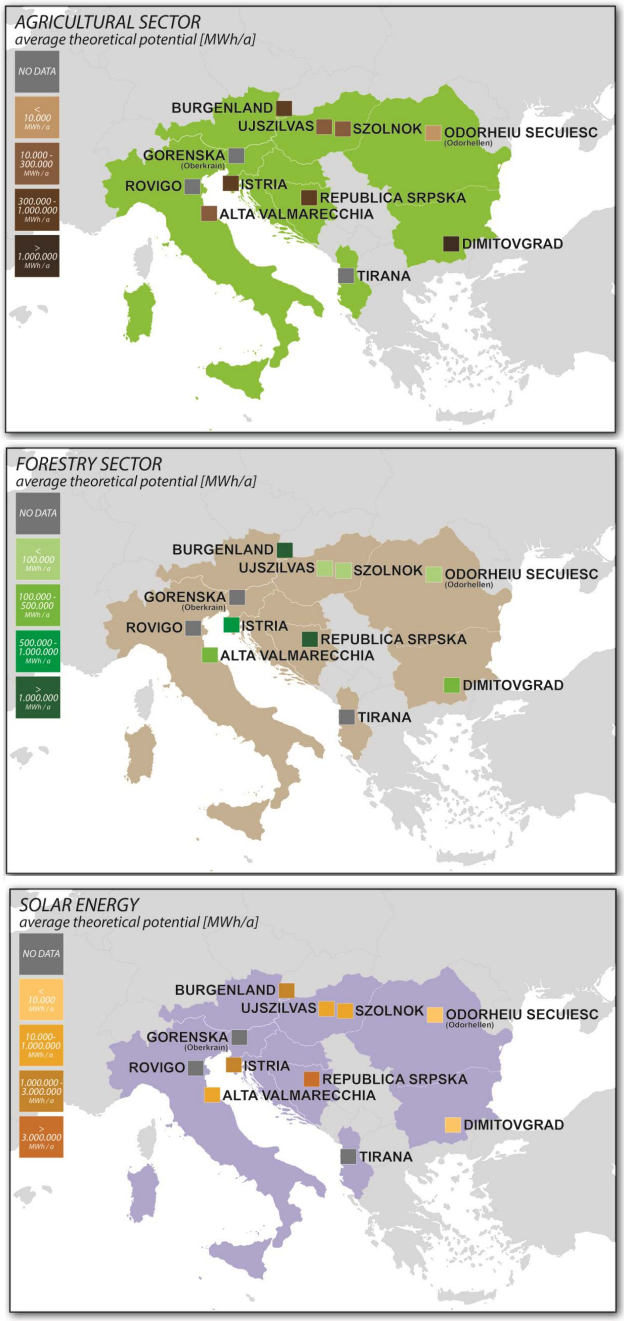



Figure 2: Theoretical potentials in the agricultural sector, forestry sector and solar energy in the SEE area (source: prepared by ERDF PP6 – EEE - European Centre for Renewable Energy)

To visualize the theoretical RES potentials in the dominating sectors of agriculture, forestry and solar energy in the SEE area maps have been created.

The first map is showing the theoretical potential in the agricultural sector in the SEE territory now clearly shows that the majority of the involved TERRE partner regions have quite a lot of existing potentials in this sector. Some regions have no data on their potentials, but this often represents that it is not easy to have access to detailed data, which is often restricted by public authorities and is often related with data privacy protection issues. Often it is also very expensive to come to useful data or it takes a long time and so some regions haven't been able to get all information necessary to estimate all RES potentials of their territories.

In the second map is shown the theoretical potentials of the forestry sector in the SEE territory is demonstrated it is visible, that there is a quite good mix of regions that really have a huge potential on forestry biomass, some that are quite in the middle and some with less amounts.

A similar picture is given, when the theoretical potential of solar energy is considered. If the use of the existing potentials in terms of photovoltaic energy or solarthermal energy is used, depends most of all on the needs of the regions, but most of all there will be a mix of using solar energy for hot water production and to use solar energy for electricity production to me more independent from energy purchase.




Summarizing it can be said that the situation on the theoretical available potentials in the regions is as follows:

- Resources in the agricultural sector are in big amounts available in Burgenland/Austria, Dimitrovgrad/Bulgaria, Istria region/ Croatia and Republika Srpska/Bosnia Herzegovina. In less amounts they are existing in the remaining regions of Szolnok and Ujszilvas/Hungary, Alta Valmarecchia/Italy and Odorheiu Secuiesc/Rumania
- Quite the same situation is visible in the forestry sector with exception of Dimitovrag/Bulgaria which counts in this sector to the countries which have less amounts in the field of forestry resources
- The solar energy potentials are very high in Republika Srpska/Bosnia Herzegovina, in Istria Region/Croatia and in Burgenland/ Austria. In the other regions the solar energy potentials are clearly existing, but not in that huge amount as they have been analyzed for the mentioned regions
- Furthermore Hydro power potentials exist only in tow partner territories in a notably amount and those are Szolnok/Hungary and Republika Srpska/Bosnia Herzegovina.
- Wind power potentials are existing in Burgenland/Austria, Istria Region/Croatia and in Republika Srpska/Bosnia Herzegovina
- In terms of geothermal energy the Hungarian regions like Szolnok and Ujszilvas have theoretically a huge potential, as well as the Republika Srpska/Bosnia Herzegovina

So in general it can be said, that the agricultural sector represents in the TERRE project area the highest potential and the hydro power sector represents the lowest one.

2.2. Overview of RES potentials already used in the partner regions

As a very interesting aspect it was also analyzed the actual use of resources in the regions, to know which are the most important resources based to local use and local needs, because the countries and territories involved are quite different in RES use and RES consumption. Figure 3 shows the actual use of renewables in the TERRE project regions and the picture is totally different in comparison to the previous one, which shows the potentials in the regions.

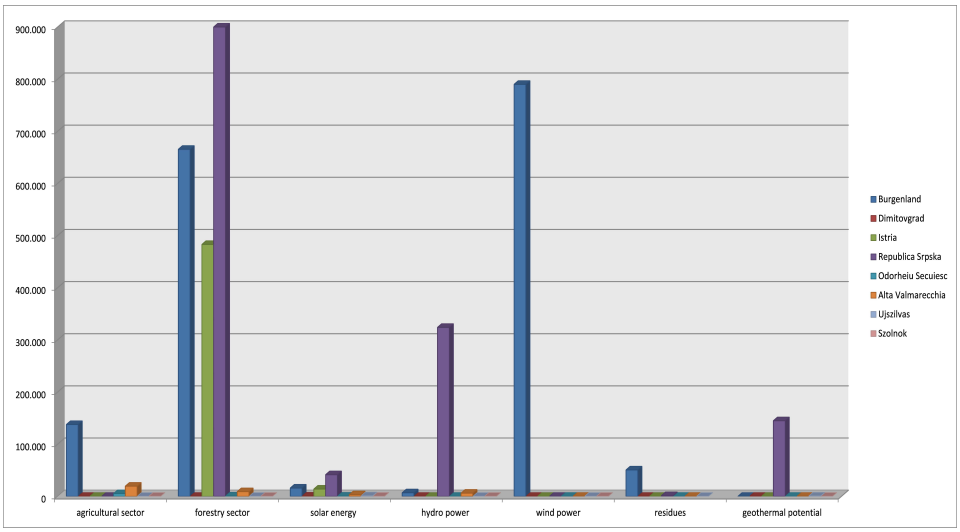
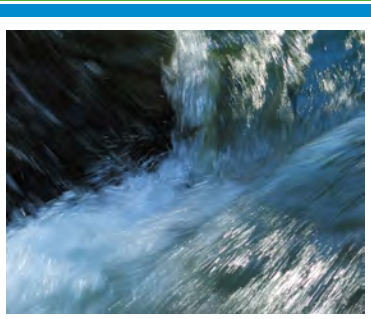


Figure 3: RES potentials already used in the partner regions
(source: prepared by ERDF PP6 – EEE - European Centre for Renewable Energy)






When agricultural sector is considered it can be seen that this sector has the highest amount of theoretical potential in all territories involved, but is only used in the region of Burgenland/Austria, in Alta Valmarecchia as well as in smaller amounts in Odorheiu Secuiesc/Romania.

Another picture is given when the forestry sector is considered, because here is a very strong usage of this resource in those three project regions where also the most potentials are given. Those are Republika Srpska/Bosnia Herzegovina, Istria Region/Croatia and Burgenland/Austria. So this shows the importance of forestry biomass in the SEE territory, because it is from the availability point of view the most important as well as from the utilization point of few.

A huge potential for the further development in the field of renewables is given in all partner countries in the field of solar energy use, because the analysis show that there are very big amounts of potentials for solar energy given, but actually a very small rate of solar plant (if thermal or photovoltaic) implementation.

When we consider other types of RES:
Hydro power is relevant for Republika Srpska/Bosnia Herzegovina, because they have a huge potential as well as the highest rate of implementation in the TERRE project area. Wind energy and residues are only used in in the region of Burgenland/Austria, but potentials are theoretically also available in other regions which could be part of future energy strategies. Geothermal energy has a high potential in the Republika Srpska/Bosnia Herzegovina and is already used in the region for energy production. There are also two other project regions in Hungary (Szolnok and Ujszilvas) that have a huge potential which is still unused and could possilby be in future exploited.

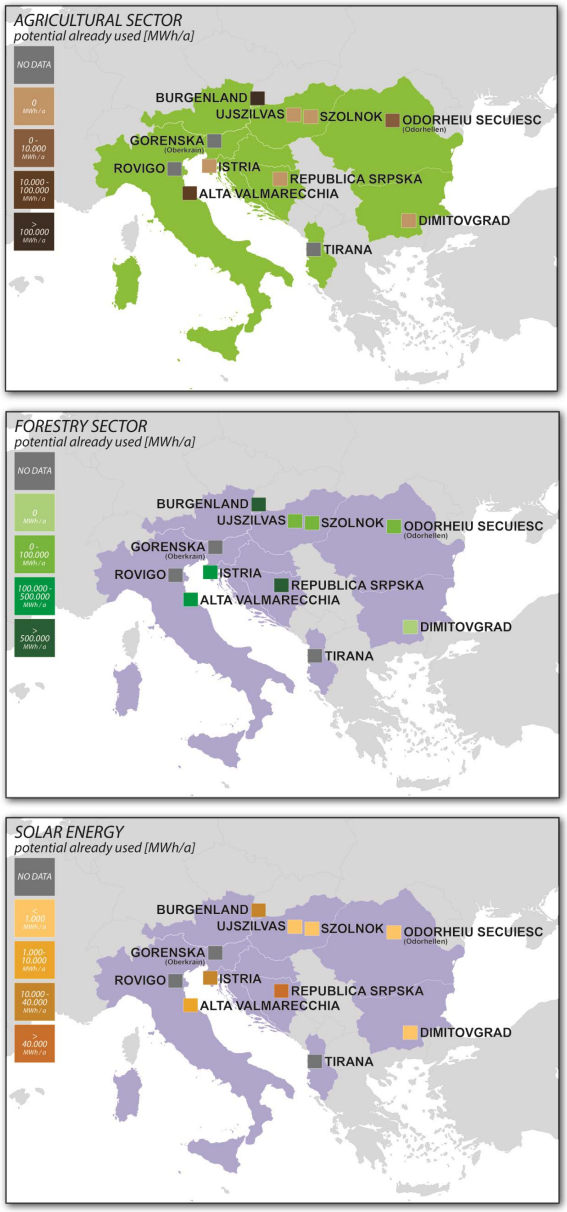
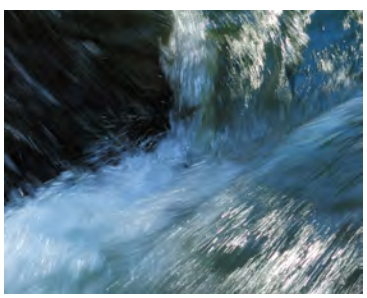


Figure 4: RES potentials already used in the agricultural sector, forestry sector and solar energy in the SEE area (source: prepared by ERDF PP6 – EEE - European Centre for Renewable Energy)






2.3. Overview of remaining RES potentials in the regions

When finally the picture of the remaining potentials is considered there is quite the same situation reflected, that the main potentials in the regions lie in the field of bioenergy and solar energy use. Some Regions are furthermore quite rich in wind and geothermal energy use, but the possibilities of exploitation of those resources are quite different in the regions and often also quite difficult. The analysis of the RES situation in the territories was very valuable for the majority of the partners, because not only the actual situation of potentials and possibilities has been analyzed but also the stakeholders and important decision makers of the territories have been confronted with the situation and different strategies for future development have been discussed.
But for the use of renewable energy sources not only the factor of green electricity production, creating jobs, increasing the economic situation of the territories have to be in the foreground, but also how the resources can be used in a sustainable way, to not harm valuable land and the environment.

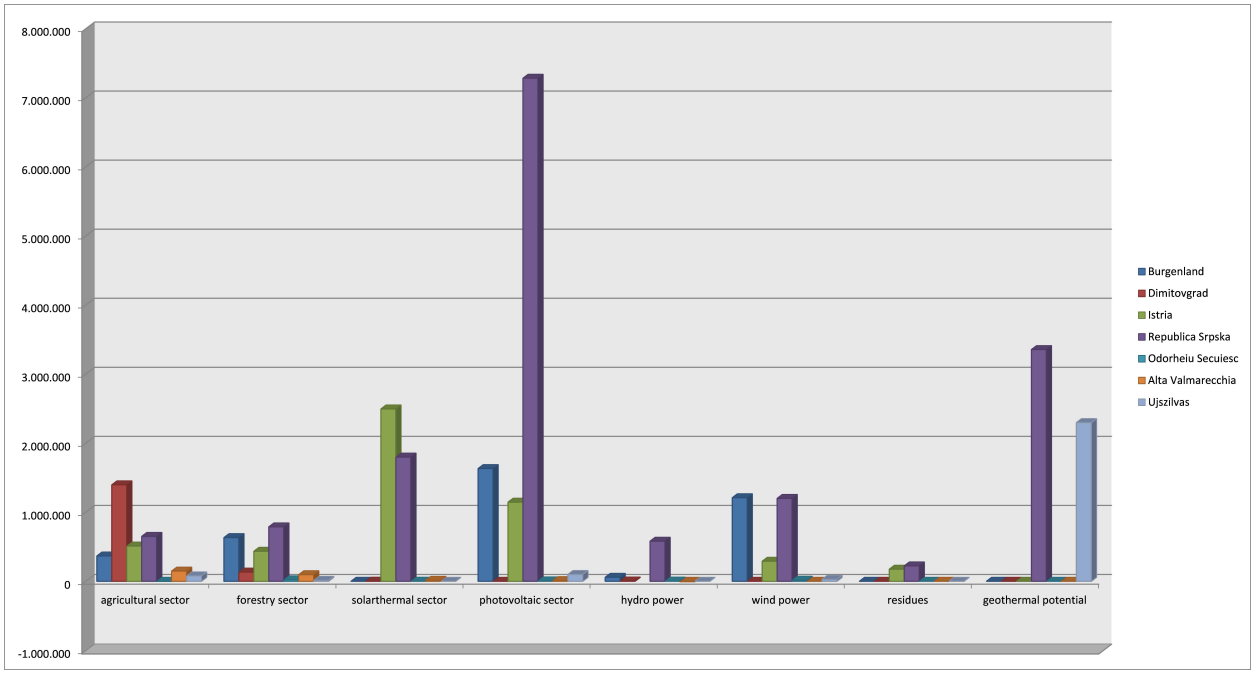


Figure 5: Remaining RES potentials in the regions
(source: prepared by ERDF PP6 – EEE - European Centre for Renewable Energy)




3.Expected socio-economic effects within the partner regions

From the TERRE partners point of view it can be summarized that if was seen as one of the highest benefits of the investment in renewable energy is the opening of temporary jobs during construction and permanent jobs during operation of the plants, as well as jobs during the production of components and systems for the use of renewable energy sources. It was seen as a very important issue that employment at local level will contribute to the opening of jobs during the operation of the system, such as for persons employed in maintenance and operation management.

In the involved partner regions there often are existing a few companies which produce components for different RES systems and some companies that are already engaged in planning, installing and maintaining systems that use renewable energy. This are actually most off all represented by companies for low power systems in smaller scales, but they suppose that further investments would certainly lead to an expansion of this sector and existing companies can profit and new companies can be established.

To assist local market development it is seen as an essential aspect from most of the partners to open local jobs in planning and installation of RES systems. Job creation is also seen to be closely related to incentive policies towards certain technologies, so it is therefore important to determine targets and policies for encouragement of investments in RES that would be aimed to create new jobs at the local level. In addition to jobs in construction of components for RES systems and in planning, installing and maintaining of these kinds of systems, investments could lead to job creation at local level in the following sectors:

- transport, supply and preparation of raw materials for the plants
- manufacturing of elements for the construction of the systems
- installation of plants
- operation and maintenance of the systems/plants
- other supporting operations

Renewable energy sources represent for all regions a potential that will in the future significantly participate in the structure of satisfying energy needs. Also the accession to the EU will contribute for some regions to increase the usage of renewable energy sources. It is also expected to increase the awareness about environmental and climate responsibility towards the use of renewables, not only in the category of economic interest, but also in the contribution for every citizen and business. It is expected that in future the interest in the use of renewable energy sources in citizens and businesses will get ahead of the real economy, as a result of raising collective awareness of their contribution to reducing climate change.

To develop clear energy strategies in the TERRE project regions was a further important aspect that was mentioned. by partners.

So the specific number of jobs and revenue will depend on the objectives of the energy strategy and plans for renewable energy sources at the state and country level, as for possibilities for incentives from EU and other funds.

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