# GreenGovern New business opportunities

#### - good practices -

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A business with plenty of challenges, that achieved energy independence and is a model protecting the environment

For as much as 13 years, numerous articles have been written about the affair owned by the Ungureanu family from Firladeni (Hincesti). In 2006, the "Garma-Grup" SRL, which was specialised in cereal production, has diversified its business by building an ethyl alcohol production factory. It was also one of the

first private factories of this type constructed in the Republic of Moldova. Due to investments in great amounts, the leadership hoped to recover its expenses through selling the products on the EU market.

Unfortunately, the expectations have not been met. The marketplace was limited and the manufacturing and transporting costs exceeded the income. In order not to go bankrupt, Tudor Ungureanu, the head of the company, has taken the risk to invest in another field, which was just as new for the Republic of Moldova. Therefore, in 2010 the construction of the first bioethanol (an environmentally friendly fuel used as an alternative to gasoline) factory has been announced. The

work has begun, but there was another issue standing in its way. The leftovers from the bioethanol production, the so-called *borhot*, needed to be separated and used. This meant a lot of effort, time and additional resources.

Nevertheless, the courage of turning a challenge into an opportunity has, again, shown great results. In 2011, "Garma-Grup" has received a grant from the National Ecological Fund. As a result, in 2013 the producing of biogas has begun. Initially, the leftovers from



bioethanol production, animal waste from neighbouring villages, slaughterhouse waste and other agricultural products requiring fermentation were to be processed at the biogas production station.



At this point, in 2013, the idea of opening an animal farm with a capacity of 3500-3700 heads of cattle came up. With the establishment of the beef breeding farm for meat, two other issues have been solved: with the solid part of the obtained *borhot*, animals are fed and the

manure is being used in the fermentation of the raw material as part of the biogas production. The tendency of having a closed producing cycle and minimal producing costs has led to the idea of self-sufficient energy. Therefore, the gas produced at the biogas producing station is being used at the company's boiler and the producing of electricity. Now, more gas is being produced than consumed. The company does not consume any from its energy network. The electricity produced not only covers the own consumption of the enterprise, but

being delivered to the distribution network become has an additional profitable business for it. The tariff for the delivered electrical energy is established the National by Agency for Energy Regulation (NAER) and it is 1.73 lei/kwt.

So, we can conclude that at the grounds of this successful affair have been several



factors: the insistence of the leader and of its management team to overcome all of the challenges, the risk of investing in diversification, the wish of assuring an energy independence and the responsibility of protecting the environment.

"Rusale paste" has started its activity in 2018. Since then, it succeeded in making a name for itself on the domestic market. Two spouses, Maria and Sergiu Chirinciuc from Carpineni (Hincesti) launched their business in their native village simply because they care.

## A rural business impresses through its modern management

Although, after 17 years of working in Italy they managed to fit well in the workforce and had a solid salary there, they never gave up the thought of returning home. They wished to come back namely to their native village, where their parents had been waiting and where they felt needed.

"Rusale paste" are the only producers of fresh pasta from the Republic of Moldova. Their products are produced following the Italian recipe with distinctive flour imported directly from Italy. At the moment, the company



provides over 20 sorts of pasta, including a few special ones for children. These are made out of natural ingredients like carrots, beets and spinach.

It took no less than 5 years for the initial idea to become reality. Its founders had to overcome a variety of challenges, including bureaucratic ones, but these have been defeated through hard work and persistence. Meaningful support in the process of its start-up came from the local public

authorities, that have facilitated the launching of this family business and that still support its development. The final products are commercialized under the "Carpini" brand, out of Chirinciuc family's love for their native village, Carpineni.

Speaking of their modern way of managing this business, it is necessary to mention the way the company promotes its products, how it has established relationships with its potential customers and its focusing on the quality and diversity of its products as key elements towards the company's expansion within the domestic market.

Chirinciuc family's approach is also a modern one. They tend to use as rationally as possible the resources needed in the production process. Even before the launching of the business, they considered using solar batteries in the process of producing hot water. Monthly, the company uses about 15 t of hot water produced by alternative sources of energy. Therefore, during the solar calendar

(about 10 months per year), are being used about 150 t of hot water. This allows them to save up the power from the network, and also money.

"We are thinking about buying and installing photovoltaic panels in the future. This would allow us to fully ensure the enterprise's necessities with alternative



electrical energy. Unfortunately, these are only plans, we still have to plan their realisation. Hopefully, they will come to reality as soon as possible", has mentioned the entrepreneur Sergiu Chirinciuc at the end of the interview.



### A perspective regarding green energy after a five-year-long experience in the domain

Founded in 1995, the "Prenco Grigorii" company from Brinzenii Noi, Telenesti district, has sought development through diversification since its establishment. Firstly, it started its activity in the growth of cereal crops. Eventually, it has also

created a cattle farm to expand its value chain. This allowed them to use the food produced in households as nutrition for animals, therefore the latter was able to produce milk, meat and other zootechnical products.

While being in a steady searching process, Mr Prenco was inspired by the experience of native farmers, but also from ones living abroad. During the following years, he has gained experience from different trainings and organisations. He has always sought to learn from other successful farmers, thereby, in 2014, after multiple visits in Romania, Mr Penco decided on installing a photovoltaic panel system.



Concerning spendings on electricity, the initiative also leads to financial savings from the cattle farm. Later on, further analysis into the matter has shown that this very expensive investment was unaffordable at the time. By his sheer commitment, he eventually overcame this issue. A grant has been given by the National Agency of Rural Development with eventual support from Poland. The grant provided about 70% of the needed investments, therefore only 30% (about 140.000 lei) was left to be met by the company itself. The project has been implemented in two stages.

In 2014 the first on-grid photovoltaic system with a power of 5kW has been installed, with a prospect of increasing up to 20kW. In 2015 its power hit 15 kW and today we can say that it finally reached its full capacity. Through this project, "Prenco Grigorii" has managed to: reduce the consumption of electricity, introduce "in advance" the excess of energy in the electrical network and using it in the passive period of the photovoltaic system, the nighttime for example. Now, about 30% of the electricity produced by the photovoltaic panels is used by the company, mainly ensuring the cattle farm, engines, electrical aggregates, fridges and the hot water production with electricity. The surplus of energy is delivered in the national distribution network at a price established by ANRE and it is about 1.90 lei kW/h. Thanks to the grant, the 30%

invested by the company has been regained in a little more than 2 years. If the company would have not benefited from the offered grant, it would have taken about 6 years to recover the money.



After 5 years since the photovoltaic system has been realised, Prenco Grigorii was asked if now he would act the same way. His response was:

"Absolutely YES. Only now I would be more prepared and would not miss certain opportunities. Firstly, the that entrepreneurs work in with domains considerable consumptions of power should

install a photovoltaic system, which does not only save a lot of time, but also financial resources. From the very first day, they must determine their power consumption. If the estimate shows that there will be an excess of produced and unused energy, the necessary documents must be prepared to deliver this power straight into the network. From my personal experience, I can say that this process takes time. The power delivered to the network until the signing of the contract is likewise not being paid."

Nevertheless, the most important thing mentioned by the entrepreneur is that his company does not use electrical energy. This is an important resource and must be saved up. He says that "Prenco Grigorii" uses solar energy that heats no matter the situation and obtains electricity for his own business and for the people that use it.

Another idea suggested by him is that NAER should establish bigger prices for the green energy that is produced and delivered to the network, at least while the investments are being recovered. He believes that this will stimulate new entrepreneurs to produce green energy. This would ensure the growth of green power usage with at least 10% by the end of 2020.





### A lavender-flavoured green business

"Cioara", the limited liability company from Hincesti raion has been founded in 1999. This household has about 1500 ha of farming land leased from over 900 individual owners from

Cioara village. The company has 2 directions of activity:

- Agriculture: cereal, fruit and vegetable production on a surface of over 100 ha.
- The growth of oil crops and the extraction of aesthetic oil: lavender, dill, hyssop, sage and mint on a surface of about 400 ha.

Since 2007, the company also applies eco-agriculture. The production of eco cultures implies more effort and of course more spendings, but, as specified by Vladimir Simaşco, the director of this enterprise, it is worth it. An investment of about 2.000 euro in a hectare of lavender farmland, for instance, can be recovered in 2 years since the planting. The typical rules imposed by eco-agriculture are related to the use of eco seeds, organic fertilizers as compost and other natural extractions that facilitate the growth of a rich harvest. Moreover, spraying the land with herbicides is not allowed. Still, in spite of all of these restrictions, the "Cioara" company has promoted the growth of eco cultures this entire time. It is a fruitful business since the external market requires eco aesthetic oils and EU buyers are willing to pay higher prices. The owned

properties of the enterprise is just an oil extraction factory. The volatile oil is obtained through water or steam distillation, the latter being the most used.

Another fact worth mentioning is that in 2017 the Applicated Physics Institute of the Academy of Sciences of Moldova has done several experiments on the technology of the superheated-steam machine for processing aromatic raw material. An energetic-efficient mobile installation has been created based on biomass. It was elaborated for the extraction of essential oils out of raw aromatic matter. The system allows the company to save up thermal energy for this extraction. The installation has been tested at "Cioara" SRL. This is yet another confirmation that the leadership of the company are promoting eco-friendly technology.

The essential oil produced has opened for Cioara the opportunity of exporting in the EU. The lavender, hyssop, sage and dill oils are now certificated eco products.

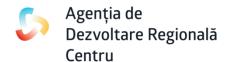
Most of the essential oils produced by "Cioara" LLC (about 90-95%) are being exported in european states like Austria, Bulgaria, Germany, the Netherlands, Poland, Romania etc. Now, the company is selling the extracted oil to intermediate companies, which pack it in small recipients later on. These companies benefit from a considerable profit. Shortly, "Cioara" wishes to launch its packing line to guarantee the enterprise a greater profit.

The essential oils produced by "Cioara" LLC are Moldova's business card at different exhibitions of eco-friendly products.

















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