

Jose Solis Parejo - Regional conflict between Biomass plant and animal husbandry sector in Extremadura, Spain



Background information

The two main bioenergy production companies in Spain, ACCIONA and ENCE, have reacted to the complaint of unfair competition from the Union of farmers and ranchers of Extremadura (a region in southwest Spain bordering Portugal), which requires that straw be replaced for biomass by woody debris while the drought lasts. On the one hand, the bioenergy company ensures that the straw consumed by its Biomass plant only represents 4% of the straw consumed in the Region. On the other hand, ENCE Company insists that it does not consume any type of biomass that can be used to feed livestock for energy generation [1].

The Union requested at the beginning of December a meeting with the people in charge of the industries transforming energy through the Biomass of Extremadura so that during the period that this drought lasts, modify the raw material that it uses to obtain energy, using woody materials instead of straw for biomass.

One of the main problem is that since the month of April practically has not rained in Extremadura, which has led to a shortage of pastures and a lower production of cereal straw and has forced the local livestock to feed exclusively with feed and straw provided by the farmers. The situation is aggravated by the increase in costs of these products and as in the case of straw it can be proved the competition of the biomass industries, which are monopolizing the little and expensive straw that the local ranchers need for the cattle. Between October and December, the price of straw has gone up by 30%, and has gone from 69 euros per ton in October to 90 euros at the beginning of December.

The hoarding of straw by the biomass industries supposes an unfair competition with the livestock sector, since this cannot affect the increase in costs, something that happens with the energy industries. For example, ACCIONA facilities in Miajadas (Caceres, Spain) can consume 77,000 tons of straw a year, which is the same, the volume ration of 51,300 cows for 100 days.

Evaluation of the conflict

ACCIONA Energy is present in the field of biomass with three straw combustion plants totaling 61 MW, all of them in Spain. It is the plant of Sangüesa (Navarra), operational since 2002 and the plants of Briviesca (Burgos) and Miajadas (Cáceres), which came into operation in September and November 2010, respectively. Among the three plants mentioned, they process around 400,000 tons of cereal straw and other agricultural residues per year to produce electricity equivalent to the consumption of some 140,000 householding, without increasing CO₂ emissions [2].

The plant was designed for operation with 70% of herbaceous biomass and 30% of woody biomass. It currently operates at levels of 50% -50%, for an estimated annual consumption of about 45,000 tons in 2017 (compared to the 80,000 tons consumed in 2011). That is to say, the consumption figures of straw for biomass by Miajadas are much lower than those that have been made public by third parties (for instance, Farmers and ranchers Union).

In addition, biomass plant maintains about 100 stable jobs directly linked to their activity (25 of them in the plant itself). Those are the main arguments that Bioenergy company provides.

Likewise, the same sources indicate that part of the straw currently consumed responds to stockpiles of previous campaigns, due to a policy of stockpiling in surplus years, motivated by the fact that their business model does not allow them to pass on production costs prices, since subject to a regulated sector and the electricity market. In fact, no new straw has been hired since June 2017. In addition, not all the straw for biomass supplied to the plant is acquired in Extremadura, so the incidence in the Extremadura market is even lower. Also, the company has responded in a statement that it does not consume for the generation of energy any type of biomass that can be used for feeding the livestock, straw included. Another unique aspect of the biomass plant project is the incorporation of energy crops (wholly intended to feed the plant), cereals such as *Triticale* sp. and sorghum, and woody species such as poplar or eucalyptus.

This innovative character has deserved the inclusion of the plant in the *Enercorn R & D project*, framed in the VII Framework Program of support for research in the European Union, led by ACCIONA with the collaboration of companies and technology centers in Spain, Finland and Denmark. The Miajadas plant is considered an initiative with exemplary character, capable of demonstrating the technical and economic viability of this type of power plants and thus serve as an example and stimulus for its development within the EU.

To guarantee the operation of the Miajadas biomass plant, Acciona has signed a total of 120 supply contracts, 20 of them with agricultural and forestry services companies and a hundred with farmers. This supposes a boost to the primary sector in the region. The plant will also contribute to reducing energy dependence, displacing the use of fossil fuel equivalent to more than 73,000 barrels of oil per year. Extremadura has a huge potential for the development of renewable energies, with investments that in the coming years could reach 9,000 million euros, equivalent to half of the Gross before Domestic Product of the region, so it is essential to clarify how much before the future of the sector and clear all doubts about.

The company that manages the biomass plant has met with the agents of the farmers' union to try to reach a solution through an agreement. They have offered to provide more straw distributors so that they can access a greater offer in the market. The cattle exploitations are a key piece in the region from remote times, reason why the conflict that has been generated is of great complexity and draft. The future projections on renewable energies, as well as biomass, make it necessary to regularize and boost foreign investment in the region, but we must try to reach a balance with all the actors involved in the primary sector.



Keywords and identifiers of the conflict

Bioenergy, Straw, Livestock, Conflict, Economy, Development.

References

[1]
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