**Group discussion 3**

Note taker: Carmen

Facilitator: Eulogio

Participants:

* [name]: Castillo de Canena
* [name]: Magnon Green Energy, manager of the plant in La Loma
* [name]: co-founder and CEO of Bioliza
* [name]: professor commercialization and market research UJA
* [name]: Iberia Bioenergy S.L.

**1. Biomass extraction**

**- Pruning**

Prof:

* Recommends leaving vegetative/inert cover from chopped pruning.
* Chipping in the fields
* Cooperatives and service company that provide the service as intermediaries

Bioliza:

* The olive mills need to manage this: bio-industries that collect biomass, process and manage this

Magnon

* Companies that bring together tasks and facilitate the work of small entrepreneurs

Prof:

* Problem is that the parcels are small, that makes it expensive. Maybe you need to establish a minimum size of plots or unite plots to manage this.
* Chip and dry always in the field, it is important for the costs of logistics
* Marine biofuels require large quantities of biomass and when the price of fuels will drop again, this certainly won’t be profitable

Bioliza:

* Recommends small biorefineries, that are easier to manage

Eulogio: Is it worth to use the pruning? Because of the additional costs?

Magnon:

* It is the by-product that is the least profitable, because of the logistical problem

**Orujo/orujillo**

Bioliza:

* Currently, the olive mills need to pay to get rid of the orujo in the orujeras, they pay very little

Prof:

* It is necessary to reach agreements between the mills and the workers, on a long term

Magnon

* You need to try to have stability on both sides to guarantee profitability

Castillo:

* Pruning they chip and sell
* The larger wood they sell
* They make compost and feed from the leaves

Prof:

* The farmer needs to get rid of the residues

Bioliza:

* The farmer needs to take it to the olive mill
* Study technologies that make the process more profitable, it is an economic problem, they are not yet verified

Magnon:

* Have a created market niche, more knowledge of the process and subsidies

Bioliza:

* It is necessary that the farmer receives more economic assistance, that is of more interest to farmers than the environment.

**2. Biomass conversion**

Bioliza and Magnon:

* It is importangt that this takes place nearby the olive mills
* The responsibility of installing a large biorefiney depends on a private company. The public administration can assist

Magnon:

* It is necessary that there are investors that have security

Prof:

* Threat: change of legislation

Bioliza:

* Challenge: modernization of the sector and more industrialization, that the olive mills become bio-industries

**3. End products:**

Castillo:

* Depends a lot on what is possible with the technology
* It is easier on smaller scale

Prof:

* Comprehensive use according to technologies and market.

Magnon:

* Responsibility is of the market, in function of demand

Eulogio: to get it?

Magnon:

* Technical knowledge

Castillo:

* Knowledge of the product, existence, renewable origin and properties
* It is necessary for the administration to bet on renewable energies and consume them, to set an example

**4. By-products**

Eulogio: they can be included with the by-products perhaps

Magnon:

* That it is profitable, to valorize everything
* It is important to know the industry and commercial potential

Castillo:

* It is important to have knowledge of the technology

Prof:

* It is also necessary to know the demand and the product
* It is very important that the administration promotes this

**5. Benefits**

Prof:

* The mills distribute the benefits to the members

Magnon:

* To do business, every actor needs to benefit

Prof:

* It is important to reach agreement with the cooperatives, to guarantee the supply of biomass, a coherent quantity.

Castillo:

* Develop a value chain

Prof:

* The major beneficiary is the province of Jaen, this activity generates more employment, more sustainability and will put the province in a better position
* It is necessary that there is a change in the behavior of the farmer, since he only focuses on the production of the oil
* There needs to be more awareness of the value of by-producrs
* Challenge: professionalization of the sector