

Value chains : Prime mover and Main Characteristics

- Stakeholder Type
- | | |
|---|---|
| <input type="checkbox"/> Farmer | <input type="checkbox"/> Agrarian Cooperative |
| <input type="checkbox"/> Public Institution | <input type="checkbox"/> Agro-Services |
| <input type="checkbox"/> Final Consumer | <input type="checkbox"/> Farmer Association |
| <input type="checkbox"/> ESCO | <input checked="" type="checkbox"/> Agro Industry |
| <input type="checkbox"/> Pellet Producer | <input type="checkbox"/> Biomass Supplier |

Location of Prime Mover

Municipality : Valbueba de Duero

Latitude : 41.641029

Longitude : -4.260122



- Type of Residue used in value chain
- Pruning Plantation Removal Both
- Crop Species used in Value Chain
- | | | | |
|-------------------------------------|---|-------------------------------------|----------------------------------|
| <input type="checkbox"/> olives | <input checked="" type="checkbox"/> vineyards | <input type="checkbox"/> apples | <input type="checkbox"/> pears |
| <input type="checkbox"/> peaches | <input type="checkbox"/> apricot | <input type="checkbox"/> nectarine | <input type="checkbox"/> plum |
| <input type="checkbox"/> cherries | <input type="checkbox"/> oranges | <input type="checkbox"/> tangerines | <input type="checkbox"/> lemons |
| <input type="checkbox"/> grapefruit | <input type="checkbox"/> hazelnuts | <input type="checkbox"/> chestnuts | <input type="checkbox"/> almonds |

Total Plantation Area involved in the Value Chain (ha) 50 ha

Typical APPR biomass production (tonnes/year) 40

Start Date of the APPR value chain (Month-Year) 2010

Key success Factors in Value Chain

Keys of success

Select the key success factors of your value chain in scale 0-3. Then indicate the 3 most crucial factors.

Check as many as apply

Factor Group	Description	Check the influence in success:(0)-Not relevant;(1)-May have influenced;(2)-Important for success;(3)It was crucial;(?)-Unknown					Check the 3 most crucial factors in WHOLE table
		0	1	2	3	?	
Project	There was an important effort in determining the feasibility and planning prior starting the business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	The implementation of the chain considered the target consumers and their quality requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Market was analysed, and contracts prepared prior start	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Product Quality	Biomass was labelled or certified according to existing standards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	The quality of the biomass product is object of an assurance process	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Community	Permanent crop plantations are quite extended. The use of the agrarian residues for biomass was regarded by community as quite beneficial	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	There was an intense information campaign to promote social acceptance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Argarian residues utilisation for energy was subject of debate by policy makers and/or by social groups in months, or years before the investment was done	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Important program for sustainability of the winery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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		0	1	2	3	?	
Logistics Chain	There were pre-existent collaborations established between farmers sector and biomass cosumers/traders	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	The introduction of new technologies (machine, handling systems, logistic chain) supported the implementation of new chains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Private investment for entepreneurs was incentivised	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Short summary of the initiative (<100 words)

Summary of the value chain

Bodegas Emina is a winery of the Matarromera Group sited in Valbuena de Duero, inside the PDO Ribera del Duero, in Spain. The facilities of the winery were built in 2005. In this year the Matarromera Group was already promoting the "Matarromera sostenible" program, which pursued a more environmentally friendly and sustainable practice in their wine production. Among others the program targeted the reduction of wastes and emissions. Thanks to a IDAE-ICO program funds in 2005 they started a feasibility study and the investment in a new facility for producing heat out of vineyard pruning. The first step was the research in the energy content and costs reduction that the pruning biomass could provide. Bodegas Emina was supported by CARTIFF technology centre for such purpose. They detected as potential biomass resources not only pruning wood but also wood from palets or barrels. They realized the good energy content of pruning wood with circa 4000 kcal/kg and ash content (in dry basis)

Actors and Roles in Value Chain

VALUE CHAIN ACTORS		Farmers	Farm cooperative / agro productive organization	Agro machine builder /seller	Agro services Company	Residues retailer / logistics company	Biomass energy plant builder /dealer	Energy service company	Biomass consumer / energy user
VALUE CHAIN PROCESSES	APPR biomass producer		1						
	Haulage to field side		1						
	Shredding at field side		1						
	Transport to Emina facilities		1						
	Loading silo from storage place		1						
	Energy conversion in large industrial / power plants		1						

1 Bodegas Emina (Grupo Matarromera)

Fuel Specifications

Final form of Biomass prior to Exploitation

Bales of branches

Wood chips

Hog fuel-shredded

Pellets

Moisture content (%) : 25

Max Content of Ash (% a.r.) : _____

Min LHV (kJ/kg a.r.) : _____

Value Chain Details and Prices of fuels

End-users

Self-consumption

Industrial heating

Public-private buildings

Distributed heat networks

Biomass to Market

Distance between biomass production and its final use (km) :

Storage options

On-farm storage

Intermediate storage prior transporting

Direct delivery and storage at final use

No storage

Ownership of the APPR harvesting machinery

Farmer

Leasing

3rd party-private

The winery Emina

Prices of fuels sold
to final consumers

- Price of APPR biomass (€/t)
- Price of regular woodchips (€/t)
- Price of ENPLUS pellets (bulk-€/t)
- Price of domestic heating gasoil (€/l)

Have you filled the questionnaire about
mechanized pruning/plantation removal ?

Yes

No

If yes, please provide the name or e-mail you have
used on that questionnaire

Contact Data

Name : Daniel García Galindo

Email : daniel.garcia@fcirce.es

Phone : _____

Company/Organisation : CIRCE Foundation

Website (of the company or the APPR initiative) : www.fcirce.es

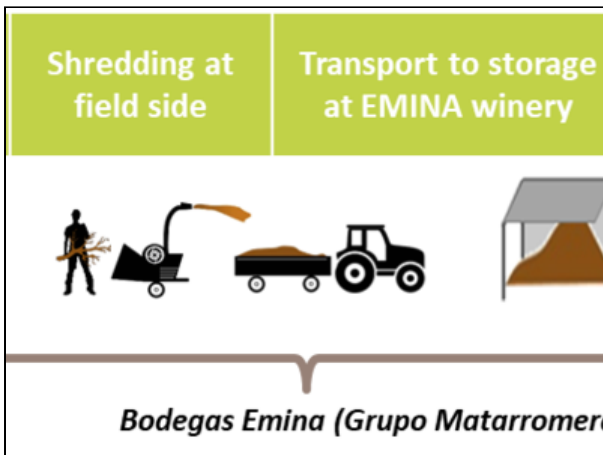
Logo of the company : _____

Country : Spain

References-External links:Provide references on which the information is based on or highlight any comments



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GRUPO MASARRO

CALDERA DE BIOMASA:

> Características:

- Caldera de biomasa para calentamiento de agua
- Proveedor: L. Solé, S.A.
- Modelo: SOL-104-C1
- Potencia térmica nominal: 200 kW
- Horno incinerador con quemador automático
- Permite la combustión de biomasa de hasta un 25% de humedad.

conecta bioENERGIA