

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 type="checkbox"/> Agro Industry        |
| <input type="checkbox"/> Pellet Producer    | <input type="checkbox"/> Biomass Supplier     |
| <input checked="" type="checkbox"/> Winery  |   |

Location of Prime Mover

Municipality : Villafranca del Penedés

Latitude : 41.343284

Longitude : 1.705279



- 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) \_\_\_\_\_

Typical APPR biomass production (tonnes/year) 400

Start Date of the APPR value chain (Month-Year) 2012











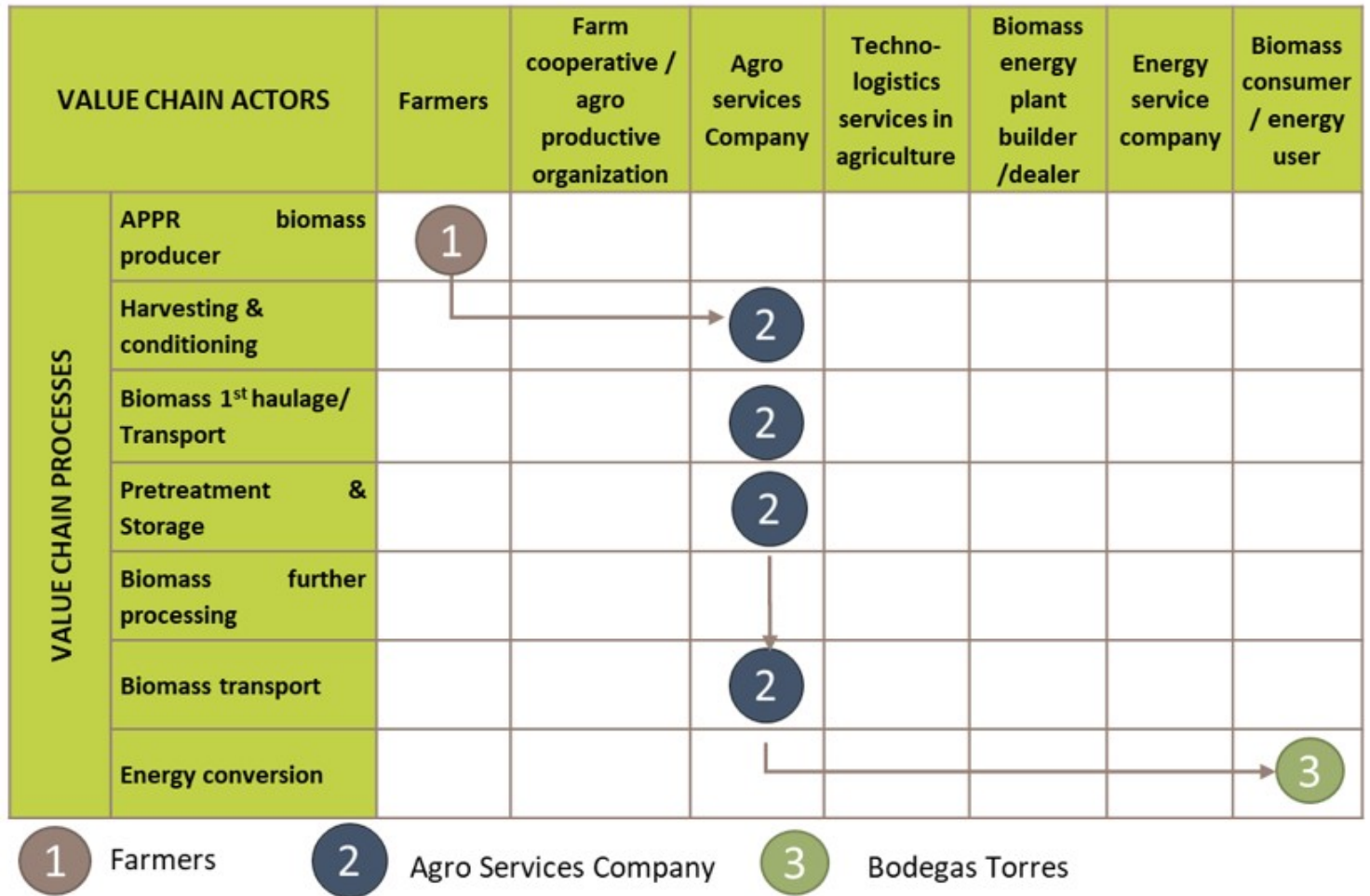
Factor Group	Description	Check the influence in success:(0)-Not relevant;(1)-May have influenced;(2)-Important for success;(3)It was crucial;(?)-Unknown					Check the 3 most crucial factors in WHOLE table
		0	1	2	3	?	
Logistics Chain	There were pre-existent collaborations established between farmers sector and biomass cosumers/traders	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Private investment for entepreneurs was incentivised	<input type="checkbox"/>	<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"/>

Short summary of the initiative (<100 words)

Summary of the value chain

Bodegas Torres has already started years ago (from 2006) a "decarbonisation" of the winery (named Torres & Earth program) by applying measures of energy efficiency and by prioritizing of biomass to cover the energy demands of the winery. Inside of this last measure, they have installed a biomass boiler fed with vineyard prunings (besides others biomass) in order to produce 4,000 kg/h of steam (equal of 2600 kW of thermal energy) to cover the cold (with an absorption equipment) and heat demands of the winery. As regards the value chain, farmers are in charge of the pruning operations and the preparation of the branches, while a service company is responsible of the overall logistics (collect, shred, store and transport to Bodegas Torres).

## Bodegas Torres





## Fuel Specifications

Final form of Biomass prior to Exploitation

- Bales of branches  
 Hog fuel-shredded

- Wood chips  
 Pellets

Moisture content (%) :

30%

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

Min LHV (kj/kg a.r.) :

## Value Chain Details and Prices of fuels

End-users

- Self-consumption  
 Public-private buildings  
 Biomass to Market

- Industrial heating  
 Distributed heat networks

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

30

Storage options

- On-farm storage  
 Intermediate storage prior transporting to end user  
 Direct delivery and storage at final user  
 No storage

Ownership of the APPR harvesting machinery

- Farmer  
 Leasing  
 3rd party-private  
 Agro service company

- Farmer's community  
 Municipality-public

- Prices of fuels sold to final consumers
- Price of APPR biomass (€/t) 55 - 65 €/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 : \_\_\_\_\_

Email : \_\_\_\_\_

Phone : \_\_\_\_\_

Company/Organisation : Bodegas Torres

Website (of the company or the APPR initiative) : <https://www.torres.es/es/inicio>

Logo of the company : \_\_\_\_\_

Country : Spain

The following are the main keys that have allowed the initiative to be implemented and be successful:

- A huge potential of vineyards around Villafranca del Penedés
- An agroservice company established in the area with properly machinery and with contact with farmers
- Tangible benefits: Savings in energy demands (around 10-12 % of consumption) and economic savings for using biomass
- Intangible benefits: Avoid pest risks, avoid fire risk, reduce CO2 -> increase the image of sustainable business

External link: <https://www.youtube.com/watch?v=5cWGQbQu6VI>



FAMILIA  
**TORRES**

