

Value chains : Prime mover and Main Characteristics

- Stakeholder Type
- | | |
|---------------------------------------------|-----------------------------------------------|
| <input checked="" 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 |

Location of Prime Mover

Municipality : Nuertingen

Latitude : 48.641207

Longitude : 9.307575



- Type of Residue used in value chain
- | | | |
|---------------------------------------------|---------------------------------------------|-------------------------------|
| <input checked="" type="checkbox"/> Pruning | <input type="checkbox"/> Plantation Removal | <input type="checkbox"/> Both |
|---------------------------------------------|---------------------------------------------|-------------------------------|
- Crop Species used in Value Chain
- | | | | |
|----------------------------------------------|------------------------------------|--------------------------------------------|-------------------------------------------|
| <input type="checkbox"/> olives | <input type="checkbox"/> vineyards | <input checked="" type="checkbox"/> apples | <input checked="" type="checkbox"/> pears |
| <input type="checkbox"/> peaches | <input type="checkbox"/> apricot | <input type="checkbox"/> nectarine | <input checked="" type="checkbox"/> plum |
| <input checked="" 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) 15000

Typical APPR biomass production (tonnes/year) 2100

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

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 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Private investment for entepreneurs was incentivised	<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"/>	<input type="checkbox"/>

Short summary of the initiative (<100 words)

Summary of the value chain

The pruning value chain is located along the lower fringe of the Alb mountains and is utilized by fruit tree smallholders of 33 small towns in the Southwest of Germany. Because the large amounts of prunings (250 kg/tree) were a disposal problem, the solution was to install local prunings deposits for the short time of the pruning season with the equivalent of 40 m³ of chipped wood at each deposit. The branches are chipped on site onto a 40 m³ lorry and transported directly to combined power and heat production plants mainly fed with pellets for combustion. This is done by a local wood producer who is the subcontractor of the county public greens maintenance. The coordination between smallholders, who cut and gather the prunings in assigned places, and chipping/transporting contractor is distributed between county and local towns.

Stadt Land Fluss (Nuertingen)

VALUE CHAIN ACTORS		Farmers	Farm cooperative / agro productive organization	Agro services Company	Techno-logistics services in agriculture	Biomass energy plant builder /dealer	Energy service company	Biomass consumer / energy user
VALUE CHAIN PROCESSES	APPR biomass producer	1						
	Harvesting & conditioning	1						
	Biomass 1 st haulage/ Transport							
	Pretreatment & Storage							
	Biomass further processing			2				
	Biomass transport			2				
	Energy conversion							3

1 Farmers 2 Local Wood producer 3 Power plant

Fuel Specifications

Final form of Biomass prior to Exploitation

- Bales of branches
 Hog fuel-shredded

- Wood chips
 Pellets

Moisture content (%) :

20-50

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) :

23

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

- Farmer's community
 Municipality-public

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



