



Workshop *“Towards a circular BIOeconomy scheme:
The role of wood from agrarian pruning and plantation removal as biomass”*



PROMOTION OF AGRARIAN PRUNING AND PLANTATION REMOVAL BY THE UP_RUNNING PROJECT

Building capacities to new consultants on pruning biomass

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COPA-COGECA



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Why a consultancy is necessary for new entrepreneurs of APPR biomass?

1. Non-technical barriers are, in most of the cases, the reason for a scarce utilization of wood from APPR in Europe
2. Entrepreneurs usually have neither examples (models) nextby to replicate, nor wise advisor (consultant) to solve their doubts or questions about APPR biomass.

uP_running partners have the knowledge and experience => **BUILDING CAPACITY**



to give valuable support for farmers, cooperatives or other companies that are interested in starting new value chains based on this type of biomass.

- to answer some of their questions, give examples of success cases, put them in contact with other stakeholders, etc.



Multiplicative Actions in demo and outreach countries

Based on own experience and practical results of the project activities partners designed the training materials

We organized a training for trainers in Brussels for project partners, adherences, and all interested representatives of farmers associations and consultants

Trainers trained in Brussels organized trainings in 7 countries both on national levels and trained over 170 consultants

The trained consultants have almost completed 46 consultancies

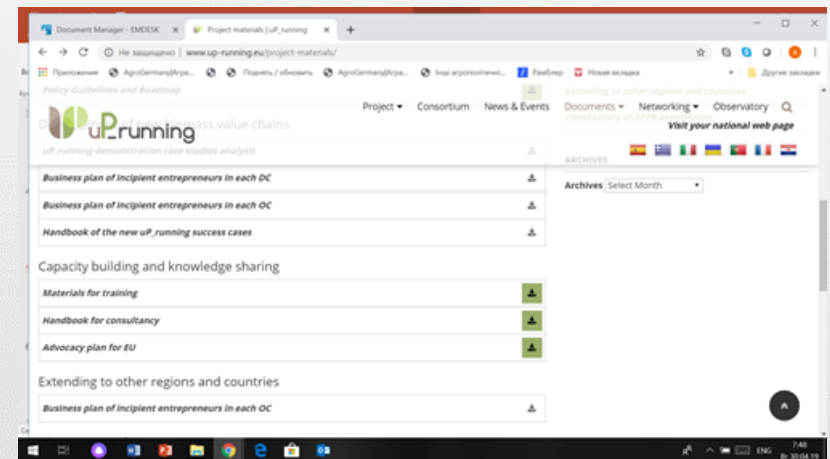


Materials for trainings

Materials for trainings include 4 PPTs:

- Main highlights and issues for energy use of APPR biomass
- How to use Handbook for consultancy: methodology
- Application of the APPR consultancy: the case of a winery cooperative in Spain
- Application of the methodology of consultancy: the case of a fruit company in Ukraine

The Presentations, Monograph, Handbook for consultancy and videos are available on the project web-site:



<http://www.up-running.eu/project-materials/>



Training for trainers in Brussels

October 9, 2018

Agenda of the Training

TITLE	Training for Trainers on Wood Biomass from Agrarian Pruning and Plantation Removal (APPR)
DATE	9th October 2018
PLACE	European Network for Rural Development (ENRD) Rue de la Loi 38 B – 1040 Brussels- Belgium, 4th floor
STARTING TIME	October 9 th at 08:45h
FINISHING TIME	October 9 th at 16:30h

Organizers: INASO-PASEGES

Tutors: CIRCE, UCAB

Participants: project partners, adherents from Cyprus, Georgia, Bosnia & Herzegovina, Poland

Totally around 30 persons.





WE HAVE TRAINED OVER 170 COUNSULTANTS

December 2018 – February 2019 – partners organized National trainings in 7 countries



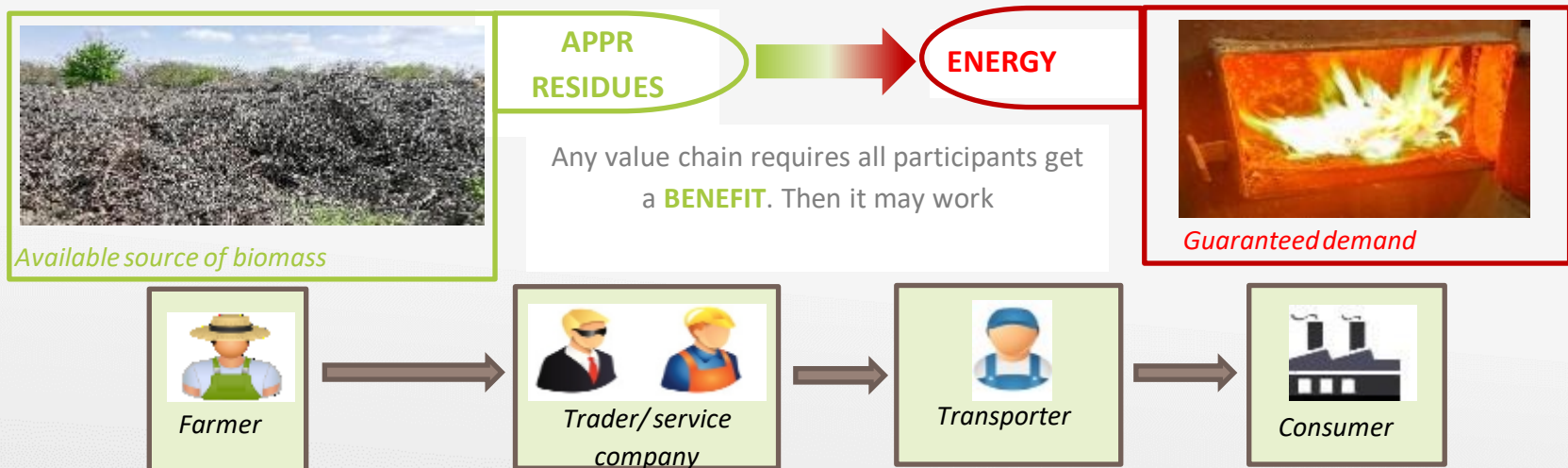


Types of consultancy

- **Potential activities included in a consultancy**
 - Training course and knowledge transfer
 - Measurement of pruning potential (based on Observatory manual)
 - Technical support for machinery selection or boiler selection
 - Put in contact with potential technology providers, or biomass consumers
 - Check the consistency of the initiative / identify the “warnings”



Specific approaches in consultancy on APPR biomass using for energy



CONSULTANT must find answers on questions:



How much APPR biomass is formed, what types and when?

What quality of APPR biofuel can be obtained and what is its price on the market?

What model of use APP biomass for energy is rational for initial conditions?

What actors can be in the APPR biomass value chain?

Who can be a PrMov (Consumer, Transporter, etc.)?

What operations can be in the APPR biomass value chain?

etc.



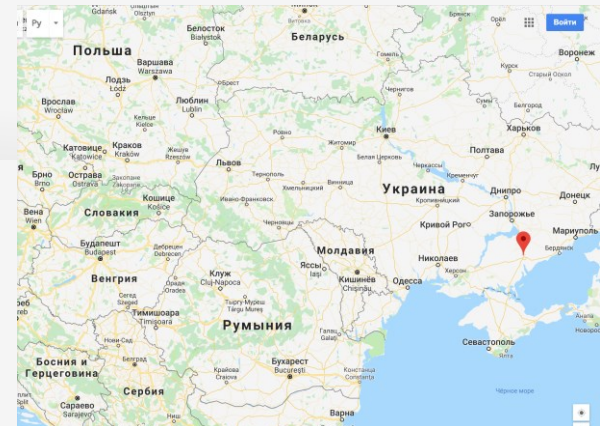
Consultancy in Ukraine



Consultancy in Ukraine

Consultant: Oleksandra Tryboy, UA Bioenergy Association

Beneficiary: Tavriya State Agrotechnological University



Type of consultancy: to estimate the potential of APPR biomass and its possible use in own boiler instead of the wood biomass and sunflower husk; to give advise on existing machinery and possible ways of its using in the production chains

The university has: 70 ha of stonefruit orchard

- 10 ha of 37 years old (2 apricot and 8 hectares of cherries);
- Cherry's orchard: year - 2008-2009, area - 25 hectares;
- Peaches: year – 2011, area - 1.5 hectares;
- Apricot: year – 2011, area – 2 hectares;
- Cherry: year – 2010-2011, area - 15.5 hectares;
- Cherry: year – 2018, area -16.5 hectares.

Hand pruning: twice/year 130 tons of residues (moisture content 46%).

Two boilers that works on solid fuel: Ardenz TM600 with capacity of 600kW and Termodinamik EKY/S 450 with capacity of 450kW.

Boilers are equipped with storage hopper and system of automatic fuel supply. They use sunflower husk, hog fuel and wood.

Business Model: Use of APPR biomass potential for self-consumption





Consultancy in Ukraine





Consultancy in Ukraine

During the 2018-2019 heating season, they **purchased 883 tons of sunflower husk with average price of 1823 UAH/t (60 EUR/t).**

The consultant calculated all direct costs for APPR biomass production and analyzed replacing sunflower husk with prunings in the existing value chain.

The estimated total direct costs for harvesting and transporting of APPR biomass is **686.9 UAH/t (22 Euro/t)**, which is MUCH less than the cost of the purchased sunflower husk.

General Recommendations of the consultant:

After pruning the APPR biomass should be left on the field for drying in summer period. In August, it should be shredded with Arpal AM-120DB. To reach the required capacity of shredder (1t/hour) they need five workers for 10-12 working days to produce 80 tons of APPR biomass which replace the sunflower husk.

An entrepreneur's decision at the end of the consultation:

The Entrepreneur will implement the proposed activities. In the first place, storage of hog biofuel in a closed warehouse will be introduced on the territory near the boiler-house. In addition, test combustion of hog fuel will be conducted, and boiler operators will be instructed on optimal boiler regulation parameters.



Consultants' specific for APPR

TO BE “open-minded” and creative

- to find solutions under different initial conditions,
- various interests of the stakeholders,
- different models of use APPR biomass for energy (self-consumption, biomass to market, power production, etc.)

TO BE READY

- to identify APPR biomass value chain actors and Prime Movers,
- to set up direct contacts and meetings with different peoples,
- to find successful decisions or solutions.

TO TAKE INTO ACCOUNT: regional specific, different types and amount of APPR biomass; local biomass market features; different key actors and stakeholders; different machines and equipment; sustainable development approaches and economic feasibility.





Take-off for sustainable supply of woody biomass from
agrarian pruning and plantation removal