



## Local Supply Chain (2<sup>nd</sup> Season Implementation)

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# Memorandum of Understanding

## New MoUs signed by Forest Worker Cooperatives

### FWC:

- FOTOLIVOS
- PAPADES COOPERATION
- CHORISTI
- SITAGRON
- ANO PYXARI
- SIDIRONERO
- SKALOTI
- SKALOTI PROGRESS



# Memorandum of Understanding

## Signing of MoUs with the president of RNP

- Signing MoU of Skaloti FWC (left)
- Signing MoU of Ano Pyxari FWC (right)



## Set of Contracts

**(Information on Contracts signed by Forest Service & Forest Cooperatives  
/MoU actors for 2015)**

No	Contract Protocol Num	Contractor Name	Contract Date	Energy Wood (m <sup>3</sup> )	Conventional Fire Woods (m <sup>3</sup> )	Technical Wood (m <sup>3</sup> )	Total Wood Volume (m <sup>3</sup> )	Percentage of Energy Wood Production	Percentage of Total Wood Production
1	103	FWC Volaka-falakro	29/4/2015	183	0	826	1009,0	100,00%	18,14%
2	64	FWC Kallikarpos	27/4/2015	93	46,8	306	445,8	66,52%	20,86%
3	55	FWC Kalampaki	23/4/2015	307,2	1,8	858	1167,0	99,42%	26,32%
4	76	FWC Prosotsani	29/4/2015	97,8	0	377,2	475	100,00%	20,59%
5	53	FWC Nikiforou	23/4/2015	117	57	774	948	67,24%	12,34%
6	93	FWC Kefalari	29/4/2015	175,2	0	408	583,2	100,00%	30,04%
7	49	FWC Sitagron	23/4/2015	238,2	9	1366	1613,2	96,36%	14,77%
8	109	FWC Skaloti	29/4/2015	205,2	0	560	765,2	100,00%	26,82%
9	51	FWC Skaloti - progress	23/4/2015	182,4	0	721,6	904	100,00%	20,18%
10	90	FWC Sidironero -Unity	29/4/2015	182,4	0	1028	1210,4	100,00%	15,07%
11	97	FWC Sidironero-Omonoia	29/4/2015	174,6	0	702,4	877	100,00%	19,91%
12	89	FWC Sidironero	29/4/2015	405,6	0	1688	2093,6	100,00%	19,37%
13	48	FWC Fotolivos	23/4/2015	109,8	82,8	592	784,6	57,01%	13,99%
14	25	FWC Choristi	15/4/2015	406,2	168,6	1178,8	1753,6	70,67%	23,16%
15	77	FWC Papades-cooperation	29/4/2015	208,8	0	1106,2	1315	100,00%	15,88%
				<b>3086,4</b>	<b>366</b>	<b>12492,2</b>	<b>15944,6</b>	<b>89,40%</b>	<b>19,36%</b>

## Set of Contracts

### (Production, based on Contracts)

**14,13 %**  
(of total wood  
production, 2014)

Additional +5,23%



Total =3086,4 m3

**19,36 %**  
(of total wood  
production, 2015)

### (Biomass in industry, based on Contracts)

Alfa WOOD/FWCs  
(2014)

Additional +7



Total =13

Alfa WOOD/FWCs  
(2015)

## Pellet Burners

### New Burner Facilities

Two (2) burners of approximately 120 Kw/h each, have been installed to public buildings of Paranesti municipality:

- Adriani school
- Nikiforos school



## Pellet Burners Information (Thermostahl - Adriani school)

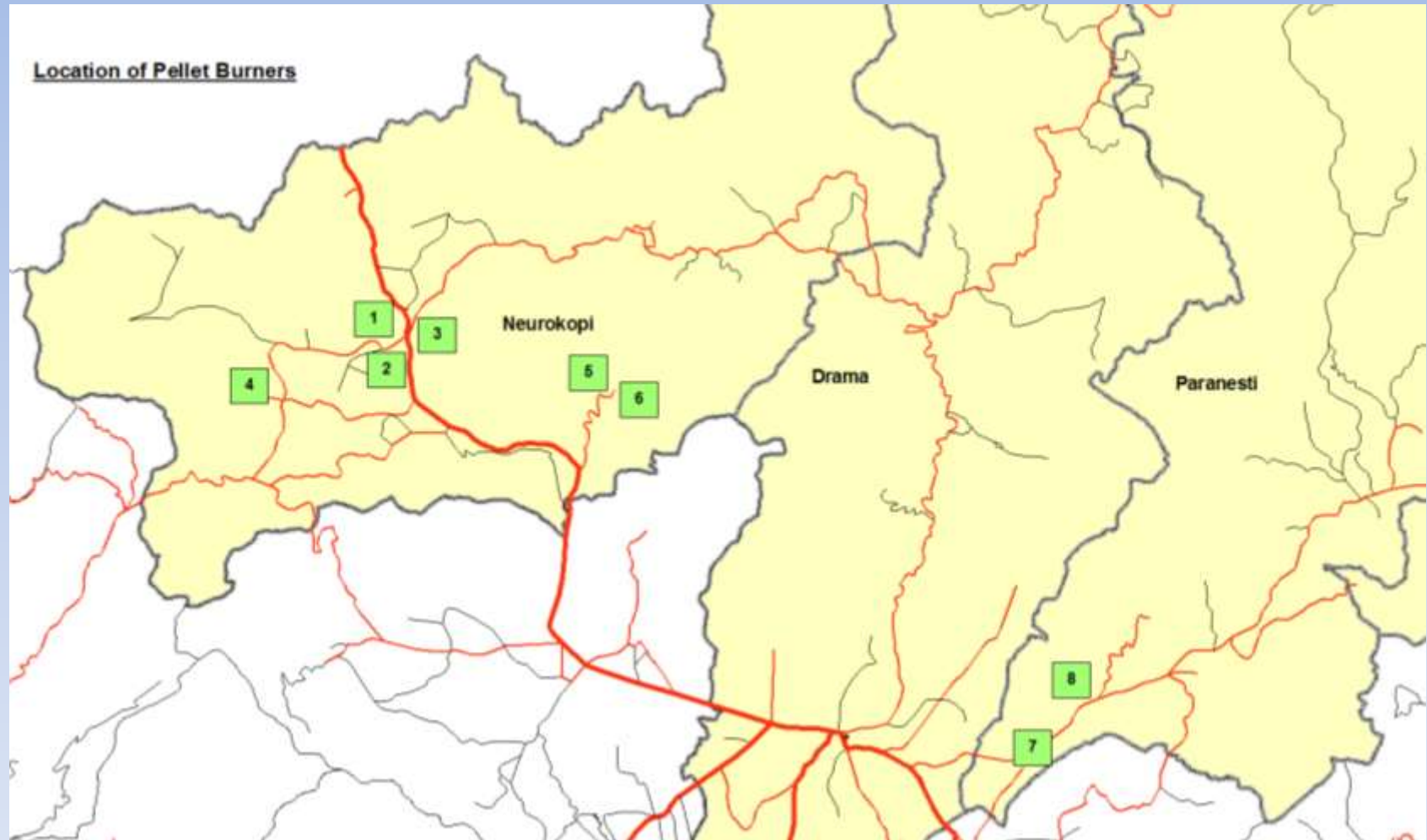




## Pellet Burners Information

no	Year	Site	Fuel type	Tank capacity (kg)	Trade mark	Model	Manufacturer Country	Minimum capacity (Kwh)	Maximum capacity (Kwh)	Mean capacity	Capacity (Kcal/h)	Efficiency (%)
1	2013	Neyrokopi Fire station	pellet	500	megatherm	MPB 80	Greece	40	80	60	51600	
2	2013	Neyrokopi City hall	pellet	1000	megatherm	MPB 80	Greece	40	80	60	51600	
3	2013	Neyrokopi gym	pellet	1000	megatherm	MPB 150 Pro	Greece	70	150	110	129000	
4	2014	Perithori school	pellet	1000	thermostahl	Pellet star 3Pass	Greece	150	222	186	160000	92
5	2014	Volakas gym	pellet	1000	termopan	TERMO KP200	Turkey	186	278	232	200000	93
6	2014	Volakas school	pellet	1000	thermostahl	Pellet star 3Pass	Greece	150	222	186	160000	92
7	2015	Adriani school	pellet	1000	thermostahl	Pellet star 3Pass	Greece	-	-	116	100000	92
8	2015	Nikiforos school	pellet	1000	thermostahl	Pellet star 3Pass	Greece	-	-	116	100000	92
										<b>1066</b>	<b>952200</b>	
									<b>Max capacity</b>		<b>1 MW</b>	
									<b>Consumption (avg.)</b>		<b>130 kg/h</b>	

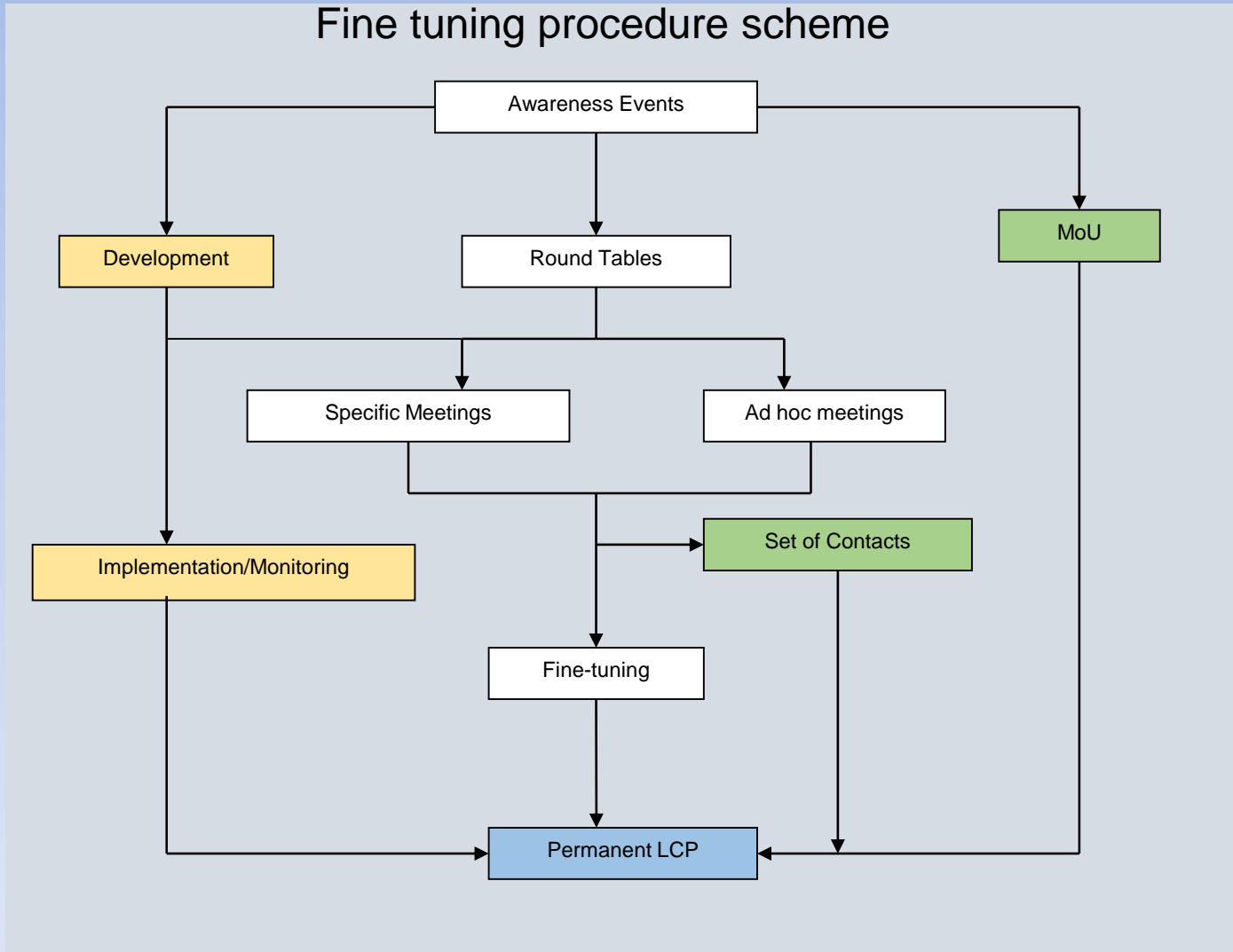
## Pellet Burners Information



# Fine Tuning Actions

## RNP and DUTH

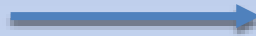
### Fine tuning procedure scheme



## Fine Tuning Actions

### Matters Addressed in Fine tuning Procedure:

1. End users identification
2. Refueling and maintenance of pellet burners
3. Cost of burner commission & installation by municipalities
4. High fees in cluster exploitation from FWC, imposed by the Forest Service



### Measures - Actions:

1. Municipalities are identified as end users
2. Refueling pellet burners by the provider, through an extra admission on the biomass value
3. Burner commission & installation through “Leasing” opportunities provided by the enterprises to municipals
4. Suggestion to the Central Forest Agency to reduce the fees in cluster exploitation from FWC, imposed by the Forest Service

## Fine Tuning Actions

### Implemented Actions (Leasing):

- Burner commission & installation through “Leasing” opportunities provided by the enterprises (ALFA WOOD), after the intervention of BIOEUPARKS actions, through 1 – 3 years Contracts with a set price.

The advertisement is divided into three horizontal sections. The top section features the Alfa Premium Wood Pellets logo on the left and the Alfa Pellets logo on the right. The central text in Greek reads: "Μείωση κόστους ενέργειας έως και 70% με βιομηχανικό και οικιακό Alfa Wood pellet". The middle section is a photograph of a large industrial wood pellet mill facility with several tall silos and a conveyor system. The bottom section shows three bags of Alfa Premium Wood Pellets on the left, with a pile of wood chips and pellets on the right. Text in Greek on the right side of this section reads: "συμβόλαιο συνεργασίας 1 έως 3 έτη με εξασφάλιση τιμής απόσβεση επένδυσης από 1 έως 3 έτη". At the bottom right, there is the Alfa Wood logo and a small Greek flag with the text "Ελληνικό προϊόν".

alfa premium wood pellets

alfapellets pure bio energy

Μείωση κόστους ενέργειας έως και 70% με βιομηχανικό και οικιακό Alfa Wood pellet

συμβόλαιο συνεργασίας 1 έως 3 έτη με εξασφάλιση τιμής απόσβεση επένδυσης από 1 έως 3 έτη

ALFA WOOD nevrolopi

Ελληνικό προϊόν

# Fine Tuning Actions

## Implemented Actions (FWC):

Request - Proposal  
of FWC for reduction of fees  
regarding wood harvest

Γεώργιος Διαγυρίδης  
26-5-14  
*GD*

ΣΩΜΑΤΕΙΟ ΥΛΟΤΟΜΩΝ ΕΠΟΗΤΕΙΑΣ  
ΚΑΙ ΑΡΜΟΔΙΟΤΗΤΑΣ ΔΑΣΑΡΧΕΙΟΥ  
ΔΡΑΜΑΣ  
Πληρ. Παπαδόπουλος Παντελής  
Τηλ. 6973228686

Δράμα 06-05-2014

Προς: 1. Γενικό Γραμματέα Αποκεντρωμένης  
Διοίκησης Μακεδονίας Θράκης  
κ. Καρούτζο Αθανάσιο  
2. Γενικό Διευθυντή Δασών και  
Αγροτικών Υποθέσεων Μακεδονίας  
Θράκης  
κ. Φραγκοσκιάκη Νικήτη

Κοιν: 1. Διεύθυνση Δασών Δράμας

Δασαρχείο Δράμας

**Θέμα : <<Πρόταση μείωσης τιμών μισθώματος δασικών προϊόντων με παραγωγή του 134 για το διαχειριστικό έτος 2014-2015.>>**

Παρακαλούμε να εξετάσετε το παραπάνω θέμα και να προβείτε στην μείωση των μισθωμάτων των δασικών προϊόντων, διότι ο φόρος που καταβάλλουμε δεν είναι εναρμονισμένος με την πραγματική κατάσταση της αγοράς, αλλά είναι αρκετά περισσότερο, με αποτέλεσμα να μην μπορούμε σε πολλές των περιπτώσεων να καλύψουμε το κόστος εργασίας.

Προτείνουμε ως τιμές στα κύρια παραγόμενα δασικά προϊόντα τι αξής:

- Κατσόξυλα δρυός από 7ευρώ/χμ να γίνει 5,50/χμ ευρώ
- Κατσόξυλα οξυάς από 4,50/χμ ευρώ να γίνει 3,50/χμ ευρώ
- Στιλόγγυλα ξυλεία οξυάς από 15/κμ σε 12/κμ

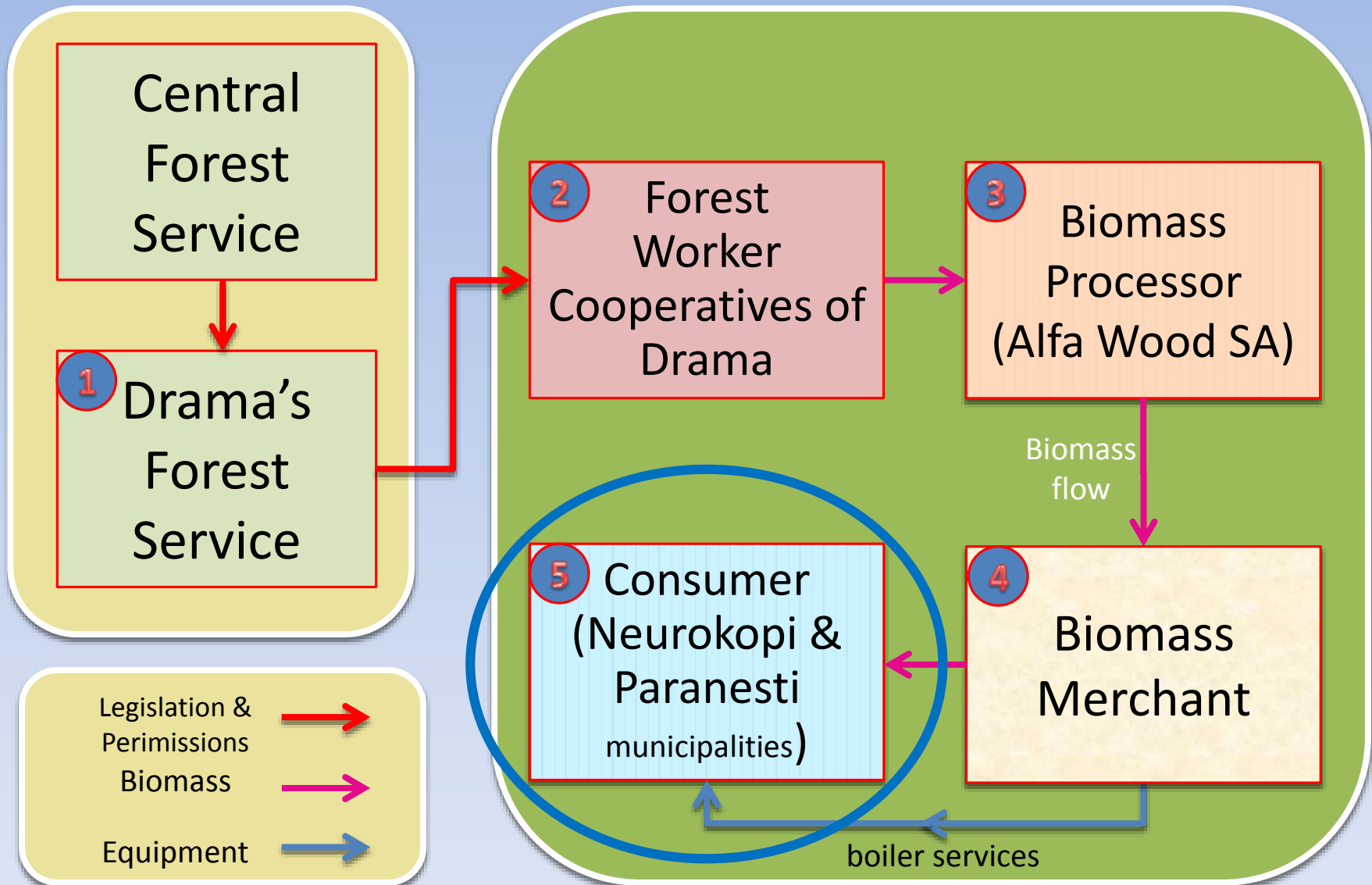
Ζητούμε να κάνετε μια έρευνα αγοράς, σε τοπικό επίπεδο και να προβείτε στις ανάλογες ενέργειες.

Με τιμή  
Ο πρόεδρος  
Παπαδόπουλος Παντελής



7549  
26/5/2014

## Local Supply Chain (2015)



# Sustainability criteria

## Environmental

Criteria:	Yes	No
Biomass production or extraction shall have neutral or positive effects on biodiversity at the landscape level	X	
Biomass production or extraction can only be performed in protected areas or areas with high conservation values if it is part of a management plan to protect biological values	X	
The integrity of relevant ecosystems and habitats for rare and endangered species shall be maintained	X	
Biomass extraction shall, if possible, be conducted in relation to other management practices in the landscape so as to sustain or enhance biodiversity, including the regional recovery and persistence of endangered species	X	
Buffer zones or vegetation filters between biomass production areas and waters and wetlands shall, if needed, be used to reduce the risk for damage	X	
Methods shall be chosen to minimise the risk for permanent physical damage to the soil	X	
Methods that cause a net depletion (after compensatory measures) of humus, nutrients and minerals in the soil below levels necessary for the maintenance of the long-term soil production capacity shall be avoided	X	
Nutrient rich waste products and by-products should preferably be recycled	X	
Biomass production and extraction shall be conducted in a way that prevents further deterioration, for example by erosion or nutrient leakage, and protects (or enhances) the status of aquatic ecosystems	X	
Land shall be used efficiently, and practices that optimise productivity shall be used.	X	
Residues and by-products should be used for energy or other applications in order to increase efficiency	X	
If reuse or recycling of waste is not possible, use for energy shall be preferred over dumping	X	
The energy input in production, extraction and conversion of biomass to bioenergy should be minimized	X	
Efficient conversion technologies shall be used	X	
Long distance transports of non-processed raw materials shall be avoided	X	
Use of waste heat shall be encouraged	X	
Combine production of heat, electricity and other products (chill, steam) should be promoted whenever possible	X	
The GHG emission savings of the production chain – including production, extraction, conversion and transport – shall be maximized and compared to a reference scenario with fossil fuels. Both long and short term gain and losses shall be evaluated	X	
The use of waste, residues and by-products shall be encouraged and accounted for when calculating GHG emission savings	X	
Land with high carbon stock such as wetlands and continuously forested areas should not be used for the production of liquid biofuels if it implies a permanent change in land status	X	



# Sustainability criteria

## Social

Criteria:	Yes	No
The production of biomass for energy shall only occur at sites where it does not threaten local/regional food supply	X	
Negative effects of competition between energy, food, fodder and material use should be minimized	X	
The possibilities of a secured long-term supply of biomass shall be considered and demonstrated when establishing a heat or power plant	X	
The bioenergy producer should take responsibility for the assessment of the values of the production area and also for the assessment of how the production may affect the local community	X	
Production of biomass for energy should not influence the possibility for recreational activity in a negative way	X	
Local acceptance and avoidance of conflicts should be reached through regional and local planning instruments, and preferably comprise multi-stakeholder dialogues	X	

## Economic

Criteria:	Yes	No
Activities shall have generally positive effects on social welfare and accessibility to rural areas	X	
Development of local energy systems that enable combinations of different renewable energy sources shall be encouraged	X	
Bioenergy systems should preferably have positive effects on the local economy	X	
Cost effective raw material production (logging operations, ...)	X	
Cost effective transportation of raw material	X	
Cost effective processing and storage of the bioenergy product (pellet, chips, ...)	X	
Cost effective conversion of biomass to energy (thermal or electricity).	X	

# Sustainability criteria

## Overall criteria

### Municipalities



- to Monitor
- to Report – Provide Data
- to Comply with Commercial Laws
- to Comply with Contracts

### FWC



- to Monitor
- to Report – Provide Data
- to Comply with Commercial Laws
- to Comply with Contracts
- to Comply with Sustainability Criteria
- to Comply with Forestry Laws
- to Comply with Forest Management Plan
- to Follow the Rules for Environmental Protection

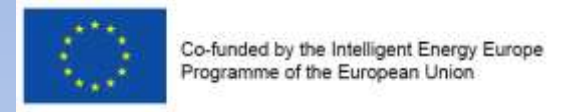
### Pellet Industries



- to Monitor
- to Report – Provide Data
- to Comply with Commercial Laws
- to Comply with Contracts
- to Impose Qualitative/Quantitative Controls
- to follow Technical Specifications

## Foreseen Actions

- **Implementation of LSC**
- **Monitoring of LSC**
- **Fine tuning of LSC**
- **Reporting**
- **Dissemination activities**
- **Expansion of LSC (MoUs, contracts etc.)**



**THANK YOU  
FOR YOUR ATTENTION**

**Leading partner**



**Other partners**

