Short Rotation Woody Crops (SRC) plantations for local supply chains and heat use

Project No: IEE/13/574



# Report on training event for public land owners (managers)

## Kerkini, Greece

WP 4 – Task 4 / D 4.5

December 2016



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SRCplus website: www.srcplus.eu

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### Acknowledgements

The authors would like to thank the staff of Lake Kerkini Management Authority for their hospitality and cooperation in organising the training event for public land owners-managers.

#### Abbreviations

SRC Short Rotation Coppice

#### 1 Introduction

The goal of WP4 was to implement capacity building actions for public land owners such as municipalities, local authorities, as well as managers of public lands. Public land owners are usually not very much familiar with growing SRCs and lack know-how in this field and to improve their understanding, skills and access to relevant information on sustainable SRC production was necessary to start taking actions towards SRC production on public lands.

The goal of the seminars for public land owners is to transfer the know-how on SRC plantation and discuss economic issues and to address sustainability issues in the selection process of suitable public land areas, to bring different advantages for the region, citizens and sustainable supply of renewable energy sources.

It was also important for public land owners to establish cooperation with other stakeholders and discuss opportunities how SRC could be developed plans in regional level.

## 2 Training event 2

On the 29<sup>th</sup> of November 2016 an *SRCplus* workshop for public land owners and managers was organized in Information Centre of the Lake Kerkini Management Authority, located in the village of Kerkini (prefecture of Thessaloniki)

# 2.1 Event title: Short rotation woody crops for biomass production and heating applications

Location/ Country: Greece	Partner. CRES	No. of event: 2			
No. of participants:13	Place: Kerkini	Date: 29.11.2016			
Target groups: forest services, public land owners, authorities for protected areas					

#### 2.2 Topics of the training event:

The following topics were addressed during the training event for public land ownersmanagers:

- Benefits from Short Rotation Crops
- Management of protected areas and SRC
- Establishment, species and management of SRC
- Cultivation of native species in protected areas
- Harvesting and handling of woodchips from SRC
- Sustainability criteria and recommendations
- Biomass production and efficiency of SRC

# 2.3 Short summary: (goals, methods, description of the programme, feedbacks, further plans)

Issues presented during the seminar were focused on the following topics: benefits establishment and cultivation of SRC, national legal framework), criteria for sustainable production, species and varieties for SRC, economic benefits subsidies for establishing woody species.

In detail, the following issues were presented and discussed during the seminar:

- Environmental, economic and social issues.
- Analysis of environmental issues in the agricultural sector and promotion of potential benefits from SRC.
- •

- Management practices in protected areas, the contribution of woody crops and environmental benefits, biodiversity issues, harvesting periods, effects on birds breeding, protection by leaching of nutrients in water bodies
- Methods, planting material, machinery for establishing and cultivation of SRC in the area
- Harvesting techniques (fully and semi mechanical technologies), machinery for harvesting, effects on woodchips and soil quality, harvesting periods
- Results on productivity of ash species, yields, growing periods, coppicing, as well as, soil and water needs, effects of establishment in protected areas, suitability for cultivation in the area
- Development of sustainability criteria for sustainable wood production, implementation of criteria in local, regional and national scale, national sustainability schemes
- Biomass production from SRC, expected profits for farmers and users of woodchips
- Economic analysis of SRC cultivation and woodchips production, potential profits for farmers, presentation of biomass exploitation schemes from SRC,







	πετώστα δν Δασικών Ειδών Μικρού Περίτροπου Χρόνου Ιομάζας για θερμικές χρήσεις"		Κερκίνη Σερρών, 29 Νοεμβρίου 2016		
16:30 - 16:20	Εγγραφές	18:20 - 18:40	Διάλειμμα		
16:20 - 16:40	Το ἑργο SRCplus Ι. Ελευθεριάδης, Τμήμα Βιομάζας, ΚΑΠΕ	18:40 - 19:00	Συγκομιδή και διαχείριση βιομάζας από Φυτείες Δασικών Ειδών Μικρού Περίτροπου Χρόνου		
16:40 - 17:00	Ο Φορέας Διαχείρισης Λίμνης Κερκίνης Δρ. Θεόδωρος Ναζηρίδης, Γενικός Συντονιστής	19:00 - 19:20	Ι. Ελευθεριάδης, Τμήμα Βιομάζας, ΚΑΠΕ Κριτήρια για αειφόρο παραγωγή		
17:20 - 17:40	Εγκατάσταση και διαχείριση των Φυτειών Δασικών Ειδών Μικρού Περίτροπου Χρόνου	19:20 - 19:40	<i>Δρ. Ελευθέριος Κόλλιας, Δασολόγος</i> Απόδοση των Φυτειών Μικρού Περίτροποι Χρόνου		
17:40 - 18:00	<i>Ι. Ελευθεριάδης, Τμήμα Βιομάζας, ΚΑΠΕ</i> Ταχυαυξή Ξυλώδη Είδη σε Φυτείες Μικρού Περίτροπου Χρόνου	19:40- 20:00	Αρονοσ Ι. Ελευθεριάδης, Τμήμα Βιομάζας, ΚΑΠΕ Ερωτήσεις – Συζήτηση		
	Ι. Ελευθεριάδης, Τμήμα Βιομάζας, ΚΑΠΕ	19.40- 20.00	Όλοι οι συμμετέχοντες		
18:00 - 18:20	Ερωτήσεις Όλοι οι συμμετέχοντες	20:00	Κλείσιμο της εκδήλωσης		



**ΚΑΠΕ** | ΚΕΝΤΡΟ ΑΝΑΝΕΩΣΙΜΩΝ ΠΗΓΩΝ ΚΑΙ ΕΞΟΙΚΟΝΟΜΗΣΗΣ ΕΝΕΡΓΕΙΑΣ

ΟΓΡΑΜΜΑ ΕΣΠΕΡΙΔΑΣ υτείες Ξυλωδών Δασικά

Co-funded by the Intelligent Energy Europe Programme of the European Union

#### 2.5 List of participants

	ΚΑΤΑΛΟΓΟΣ ΣΥΜΜΕΤΕΧΟΝΤΩΝ							
A/A	Όνομα –Επώνυμο:	Επάγγελμα:	Δ/νση:	Τηλέφωνο	e-mail:	үпографн		
1	ΚΩΝ/ΝΟΣ ΣΠΑΝΟΣ	Δασολόγος (Ερευνητής Α')	Λουτρά Θέρμης, Θεσσαλονίκη	2310 461171	k.spanos@fri.gr	Ale		
2	Днантрыг KO100B02	Gaixerphulinaz		6936507000	kolovosdim @ gurail.com	n D.E.		
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8	Zracivo Nikos	-11-	FOSTA AE	697-6 000 38 1	nstasin os @ath.forthmet.	de		
9	Pilinnishs Evaletabs	Δασο λόχο,	Δασαρχείο Σιδηθοιόστρυ β.Ιντζέ 2, Σιδηριαστρο	6945513251	efilippidis Ggnail.com	Bir		
10	Misaptzue Strainas	A ac bag of	Anerexis's Lityudyw	6972148623	steldaid and hommillor			

	CRES      Ι και εξοικοινομιτάς ΙΜΕΡΤΕΙΔΙ      θερμικές χρήσεις"        Κερικίνη Σερρών, 29.11.2016							
A/A	Όνομα -Επώνυμο:	Επάγγελμα:	Δ/νση:	Τηλέφωνο	e-mail:	үпографн		
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#### 2.6 Event photos















#### 2.7 Others (media reports: newspapers, web page)

#### https://dasarxeio.com/2016/11/23/0026-3/



#### ΗΜΕΡΙΔΕΣ ΓΙΑ ΠΑΡΑΓΩΓΗ ΒΙΟΜΑΖΑΣ ΑΠΟ ΦΥΤΕΙΕΣ ΤΑΧΥΑΥΞΩΝ ΔΑΣΙΚΩΝ ΕΙΔΩΝ

#### ENEPFEIA / 22 NOEMBPIOY 2016 /

Το **Τμήμα Βιομάζας του ΚΑΠΕ** θα διοργανώσει, από τις 29 Νοεμβρίου έως την 1 Δεκεμβρίου 2016, δύο εκδηλώσεις στο νομό Σερρών, με αντικείμενο τις «Φυτείες Ταχυαυξών Δασικών Ειδών Μικρού Περίτροπου Χρόνου για παραγωγή βιομάζας και θερμικές χρήσεις».

Η χρήση της βιομάζας ως **Ανανεώσιμη Πηγή Ενέργειας (ΑΠΕ)** αποτελεί σημαντικό μοχλό περιφερειακής ανάπτυξης. Γενικός στόχος του έργου **SRCplus (ΙΕΕ/13/574)**, που υποστηρίζεται από το Πρόγραμμα της Ευρωπαϊκής Ένωσης «**Ευφυής Ενέργεια για την Ευρώπη**», είναι να υποστηρίξει και να επιταχύνει την παραγωγή βιομάζας από Φυτείες Ταχυαυξών Δασικών Ειδών Μικρού Περίτροπου Χρόνου, με την υλοποίηση διαφόρων

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ΕΟΡΤΑΣΜΟ ΤΗΣ ΗΜΕΡΑΣ ΤΗΣ





ΤΟΥΡΙΣΤΙΚΟ ΑΞΙΟΘΕΑΤΟ ΤΑ

## 3 Material used in training activities

#### 3.1 National

Туре	Author(s)- Editor(s)	Year	Title	Topics
e-Book	G. Skarakis, K. Korres, O, Pavli	2008	Energy crops	Species, cultivation, production, needs
Paper	G. Melidis	1998	Black locust in fertile and non-fertile lands in northern Evros	Soil, irrigation, productivity
Paper	P. Aravanopoulos, P. Alizioti, A. Skaltsogiannis	1988	Mixed or unmixed plantations of poplar clones for biomass production?	Clones, planting density, production
Paper	K. Panetsos	1998	Possibilities for biomass production from SRC fro energy exploitation	Species, plantation density, rotation period, production
Paper	K. Panetsos , P. Aravanopoulos, P. Alizioti, A. Skaltsogiannis	1998	Results on biomass production from SRC	Species, production
e-Book	CRES	2006	Energy crops	Species, plantation density productivity
Paper	K. Spanos	2002	Biomass production from experimental poplar SRC	Varieties, clones, production
Book, e- Book	I.Dimitriou, D. Ruitz	2015	Sustainable Short Rotation Coppice - A Handbook	Species, cultivation, production, needs, Soil, irrigation, productivity, Clones, planting density

#### 3.2 European/International

Туре	Author(s)- Editor(s)	Year	Title	Topics
Paper	K. Spanos, I. Tsialtas, D. Mylonas	2002	Biomass production from a short rotation experimental planting of ten poplar clones in N. Greece	
e-Book	V. Francescato, E. Antonini,	2011	Energy crops in arable lands	Varieties, clones, cultivation, heat production, harvesting, economics

#### 3.3 Presentations

- 1. Presentation of SRCplus project and benefits from Short Rotation Crops, I. Eleftheriadis, Biomass dept., CRES
- 2. The Lake Kerkini Management Authority- Existing woody crops in the protected area of the lake, Dr. Th. Naziridis, General Coordinator
- 3. Establishment and management of SRC, I. Eleftheriadis, Biomass dept., CRES
- The ash species (Fraxinus angustifolia) a native species suitable for short rotation forest plantations and environmental protection, Dr. K. Spanos, Forest Researcher, Forest Research Institute - ELGO 'Dimitra
- 5. Harvesting and handling of woodchips, I. Eleftheriadis, Biomass dept., CRES
- 6. Criteria and recommendations for sustainable SRC, Dr. Eleftherios Kollias
- 7. Biomass production and economic efficiency of SRC, I. Eleftheriadis, Biomass dept., CRES

(in national language)

- 1. Το έργο SRCplus, Ι. Ελευθεριάδης, Τμήμα Βιομάζας, ΚΑΠΕ
- 2. Ο Φορέας Διαχείρισης Λίμνης Κερκίνης, Δρ. Θεόδωρος Ναζηρίδης, Γενικός Συντονιστής
- Εγκατάσταση και διαχείριση των Φυτειών Δασικών Ειδών Μικρού Περίτροπου Χρόνου, Ι.
  Ελευθεριάδης, Τμήμα Βιομάζας, ΚΑΠΕ
- 4. Ο στενόφυλος φράξος (Fraxinus angustifolia) ένα ενδιαφέρον ιθαγενές είδος κατάλληλο για δασοπονικές φυτείες μικρού και μέσου περίτροπου χρόνου και οικολογική αποκατάσταση, Δρ. Κων/νος Σπανός, ΕΛΓΟ-'ΔΗΜΗΤΡΑ' ΙΝΣΤΙΤΟΥΤΟ ΔΑΣΙΚΩΝ ΕΡΕΥΝΩΝ
- 5. Συγκομιδή και διαχείριση βιομάζας από Φυτείες Δασικών Ειδών Μικρού Περίτροπου Χρόνου, Ι. Ελευθεριάδης, Τμήμα Βιομάζας, ΚΑΠΕ
- 6. Κριτήρια για αειφόρο παραγωγή, Δρ. Ελευθέριος Κόλλιας, Δασολόγος
- Απόδοση των Φυτειών Μικρού Περίτροπου Χρόνου, Ι. Ελευθεριάδης, Τμήμα Βιομάζας, ΚΑΠΕ

#### 4 Feedback from public land owners-managers

After the development and delivery of the questionnaire public land owners-managers gave their feedback regarding topics necessary to be further discussed in future events. Topics identified under that process and during round table discussion were:

- Species, varieties and biomass productivity
- Management in public lands
- Availability of machinery, cooperation with farmers
- Woodchips handling and logistics (use of material in public buildings)
- Legal framework for subsidies
- Use of SRC in protected areas
- Trade of woodchips, security of supply