

## SRC, Common Agricultural Policy (CAP) and Greening

The Common Agricultural Policy is a system of subsidies and support programmes for agriculture operated by the European Union. CAP combines direct payments to farmers and price support. The CAP is funded from the resources of the EU annual budget.

CAP has two 'Pillars': production support and rural development. Greening is an important part of the CAP. It foresees the following measures:

- ◆ Crop diversification - a farmer must cultivate at least 2 crops when arable land exceeds 10 hectares and at least 3 crops when his arable land exceeds 30 hectares.
- ◆ Maintaining ecological areas (e.g. short rotation forestry and agro-forestry areas) of at least 5% of the arable area for farms with an area larger than 15 hectares.

SRC can significantly contribute to crop diversification and maintaining of ecological areas at farms.

Policies on rural development aim to contribute to the competitiveness of agriculture, sustainable management of natural resources and climate protection. It also facilitates the supply and use of bioenergy and supports farmers growing SRC.

### Support and additional information

Farmers, looking for information about supporting schemes on SRC production, could connect links (available on national versions of this flyer) about national authorities that provide grants and payments to the farmers under CAP.

#### For further information please contact:



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### Project partners

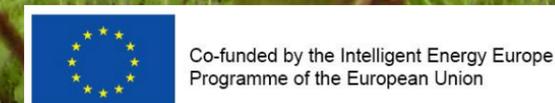


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Short Rotation Woody Crops (SRC) for local supply chains and heat use

Benefits of SRC  
for farmers



## Heat use

The cultivation of SRC and the production of wood chips for renewable energy is an alternative to conventional agriculture offering benefits for farmers, local communities, heat consumers and the environment.

It has the potential to support the EU policy to meet current and future plans for bioenergy exploitation.

Energy crops such as SRC can be adapted to the current national and local agricultural systems.

Economic and environmental benefits give "added value" to SRC.



### Economic benefits\*

- ◆ SRC provide employment for farmers, agricultural and energy production sectors, also supporting rural and regional development plans.
- ◆ SRC are robust, durable and suitable for marginal, abandoned, under-used or agricultural flood prone lands.
- ◆ SRC are alternative source of biomass feedstock that could strengthen the existing agricultural production and its contribution to the national and European Gross Domestic Product.
- ◆ SRC, as low-input crops, can reduce the production cost of wood chips and support the economic efficiency and viability of the agricultural exploitation system.
- ◆ SRC can reduce moderate contaminations from soils (e.g. remainders of pesticides) so that they can be used later again for food production or organic farming. This increases the value of the land.



- ◆ SRC production can reduce energy dependency of a farm from expensive fossil fuels as woodchips can be used on the farm for heating.
- ◆ SRC can contribute to farm diversification and may attract various grants and other payments and thus create additional income for farmers.
- ◆ SRC is harvested at specific time intervals, based on rotation period, providing secure fuel supply.

### Environmental benefits\*

- ◆ SRC can reduce soil erosion on slopes due to water retention.
- ◆ SRC can serve as windbreaks which help to reduce soil loss from wind erosion.
- ◆ In comparison to annual crops, soil compaction is reduced as heavy machinery is used less frequently and ideally during dry conditions and/or frost.
- ◆ SRC can produce energy with neutral CO<sub>2</sub> emissions, supporting the reduction of carbon emissions and mitigating global warming.
- ◆ SRC provide landscape variety and habitat for many species (plants, birds and other wildlife) improving biodiversity.
- ◆ SRC may reduce the agricultural chemicals, if converted from conventional arable land.
- ◆ SRC are potentially suitable for phytoremediation in combination with waste water and landfill leachate treatment.



### Key figures

- ◆ Profits for willow SRC (3<sup>rd</sup> cutting cycle) and wastewater irrigated willow plantation (all cutting cycles) were calculated at 637 and 529 €/ha yr, respectively (Nynäs Gård, 2011). Profits for willow SRC and wastewater irrigated willow plantation (5<sup>th</sup> cutting cycle) were calculated at 494 and 392 €/ha yr, respectively (Puckgarden farm, 2011).
- ◆ Cost analysis of the SRC value chain (taking into account all cost and revenue categories, including subsidies) shows a profit of 208€/ha yr (Eltrop L., 2012). Transportation distance longer than ca 30 km could easily result transportation cost higher than any financial aid. Economically and environmentally, a place of consumption of wood chips should be found as close as possible to the SRC field (CREFF, 2012a).
- ◆ Nynäs Gård cultivates a 76ha willow plantation irrigated with ca 200,000 m<sup>3</sup> of untreated nutrient-rich wastewater. N supply of up to 200 kg per hectare and year have been proved not to cause leaching (Dimitriou and Aronsson, 2011)
- ◆ The soil N content is higher and the nitrogen (N) availability for is lower due to increased C/N ratio of soil organic matter under SRC than under conventional agricultural crops. The soil pH can be slightly lower under SRC than under conventional agricultural crops.
- ◆ Harvesting of a willow SRC stand leads to a higher groundwater recharge in the first year of regrowth, because less water is lost through transpiration and interception. SRC as shelterbelts are shown to reduce diffuse pesticide pollution.

\* SRC may have both, positive and negative impacts, depending on the framework conditions. More details on these impacts are described in "Sustainability criteria and recommendations on SRC" which is available on the SRCplus website