Will perennial crops take off in Europe?

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About AEBIOM
European Biomass Association

- Represents and promotes interests of bioenergy stakeholders
- 30 national associations
- About 80 associated companies
- Activities: lobbying, workshops, newsletters, European projects, working groups, conferences and networking, etc.
- Based in Brussels in the Renewable Energy House
- Member of EREC (European Renewable Energy Council) and WBA (World Bioenergy Association)
Biomass potential

Biomass Potential for EU 27 – BEE project

Source: DG Agri, from BEE, 2008
Biomass supply in EU 27

Source: nREAP, AEBIOM calculation

Note: Gross inland consumption in 2006 and primary energy production in 2015 and 2020
• The potential biomass from agriculture is high
• Members States expect highest increase of biomass supply from agriculture
Energy crops around Europe

**Sweden**
- Hemp – 250 ha
- Willows – 12000 ha (decreasing)
- Reed Canary Grass – 800 ha
- CO2 tax of about 100 €/t
- Large market/demand for biomass
- Support scheme for SRF plantation (500 €/ha now)

**Finland**
- Reed canary grass – 18000 ha (decreasing)
- Large market/demand for biomass
- Mix with peat
- Emission Trading → biomass as zero emission factor

**United Kingdom**
- Willows – 4-7000 ha
- Miscanthus – 10-17000 ha (increasing)
- Limited wood resources
- Energy crop support schemes (800 – 1000 £/ha)
- ROCs for electricity - advantage for crops
Energy crops around Europe

**France**
- Willows - 500 ha
- Miscanthus - 1500-2000 ha
- Sugar reform fund (64 M€ available) → drying pulp
- Diversification from alfalfa → pellets
- Waste water treatment/water table protection/sewage sludge

**Denmark**
- Willows - 2500 ha
- High biomass price

**Germany**
- SRC – 300-1000 ha
- Miscanthus – 1500 ha
- Electricity support schemes and bonuses
- Advanced biofuels/security of supply
Energy crops around Europe

**Austria**
- SRC – 1000 ha
- Miscanthus – 800 ha
- Market for biomass/pellets
- Feed-in price for bioelectricity/biogas

**Italy**
- Miscanthus – 7500 ha
- SRC – 6000 ha
- Electricity support schemes
- Sugar reform

**Poland**
- Willows – 5-9000 ha
- Agriculture potential
- Legislation on biomass for power
Energy crops around Europe

**Ireland**
- Miscanthus – 2600 ha
- Willows – 1100 ha

**Spain**
- Pawonia - trials
- Security of supply

**Romania**
- Willows – 50 ha
- Land potential
• Many national initiatives with diversified driving forces

• Crops production technically OK, but stagnating surfaces
Take off IF ...

**Farmer’s acceptance**
- Economy – competitiveness with other crops
- Technically affordable → contractors
- Psychologically acceptable → annual better than pluriannual, grass better than wood

**User’s acceptance**
- Economy – competitiveness with other biomass sources
- Quality → agrofuels still difficult fuels

**Policy Vision**
- Food / non food, iLUC → way out ?
- EU policies → CAP priority for next period ?
- National level → CAP Rural Development
Build on opportunities

- **High yield / low input**

- Initiatives by *bioenergy producers* → security of supply

- **Marginal land** → but lower yield

- **Sustainability** → CAP - Rural Development (why not going for a mandatory measure!?)
Conclusions

Conditions are currently NOT fulfilled for energy crops to take off large scale, but there are opportunities to exploit.

Thank you for your attention

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