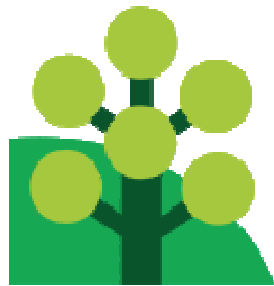


# Who's interested in growing energy crops in the UK?



**Crops for Energy**



# Where are we now?

- Plantings in England from 2001 under the Energy Crops Scheme

Crop	Year										Total
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
SRC	233	65	94	106	290	391	500	67	127	172	2045*
Miscanthus	0	52	0	302	658	2345	2413	130	441	590	6930
Total	233	117	94	408	948	2736	2913	572	568	762	8975

\* There is around 3800 ha of SRC planted in the UK as a whole

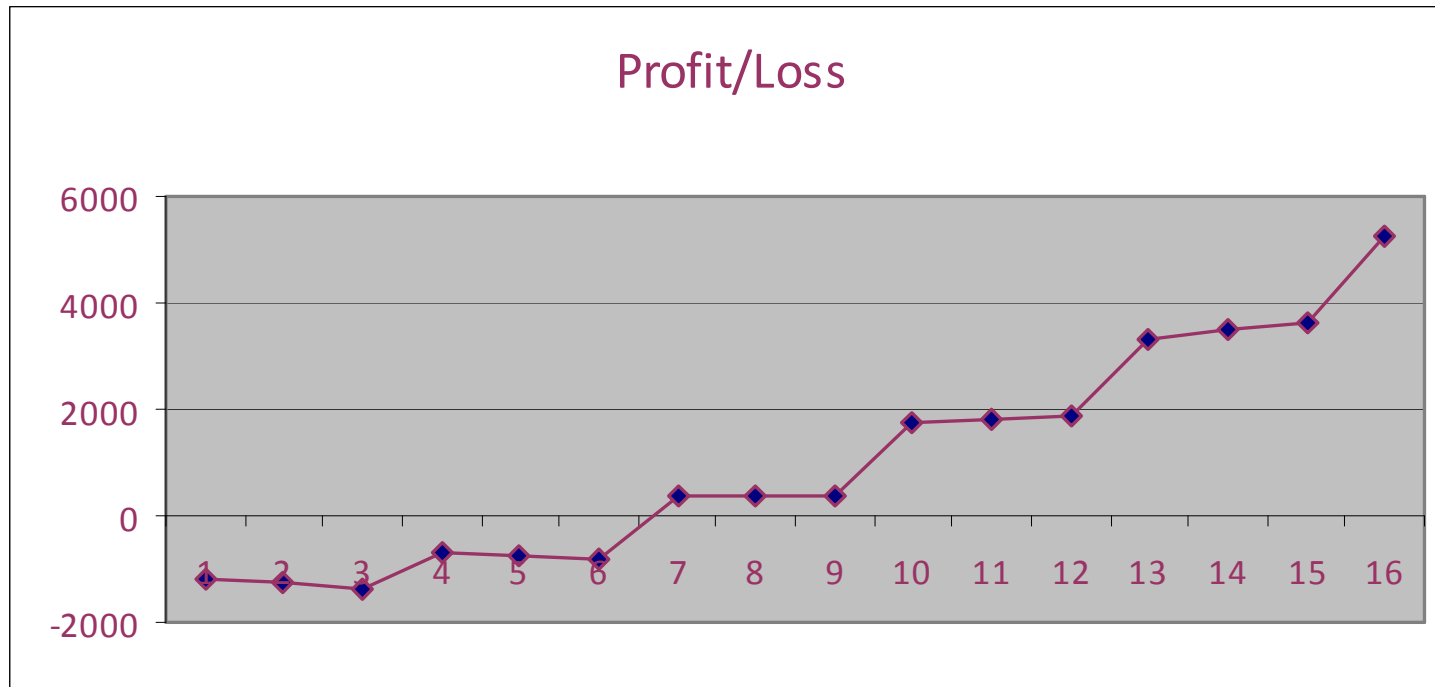
# Why aren't we growing more?

- Risky crop for farmers
- Expensive up front investment
- Poor cash flow in early years
- Lack of assured, local markets
- Perception that there is masses of wood
- Ties up land for long periods
- Might affect land values
- Lack of infrastructure
- Only appeals to a certain type of farmer
- Lack of trickle down



= Risk is too great , rewards are too small

# Why aren't we growing more?

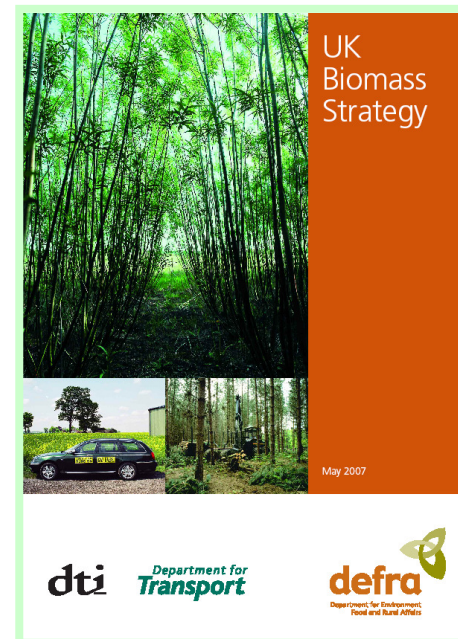
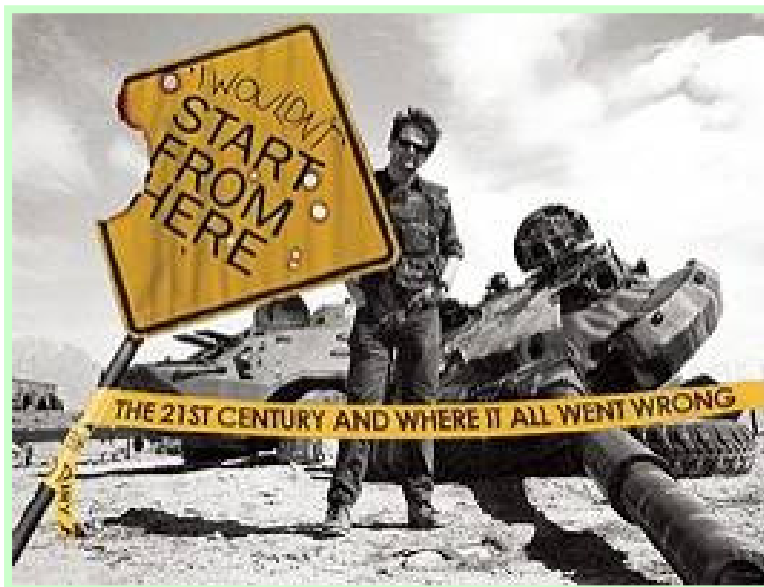


- SRC profit/loss over 5 harvests
- (Medium yields, £60/tonne woodfuel price, includes interest charges)

# Future requirements

- 350,000 hectares by 2020
- Up to 4.2 million hectares by 2050

How do we get there?





# Opportunities for SRC?



# Whose interested?

## Growers

- Industrial land owners
  - Waste management companies
  - Water & sewage treatment companies
  - Aggregates companies

## Why?

- Suitable land use for brown earth sites
- Better return than grazing
- Economic alternatives to industrial treatment of effluents

## End users

- Power stations
- Project developers
- Local authorities
- Breweries
- Airports
- AD companies

## Why?

- Incentives e.g. ROCs, (RHI?)
- Reducing carbon emissions
- Help ensure long term security of supply
- Possible use of surplus heat for drying woodchip

# Energy Crops Routemap

- Bottom up incentives (rather than trickle down)
  - Annual payments during years 1-6 - smooth out return on investment
- Assured local markets
  - Public sector obligation modelled on Landfill Tax Credit Scheme
- Increase incentives for self supply
  - Remove 3 ha limit for grant
- Improve dissemination of information
  - Requirement of grants – detailed case studies
- Innovation to reduce costs
  - E.g. Reusable rabbit fencing, improved automated planting & harvesting machinery to reduce rutting, etc
- More integrated agriculture
  - Food and fuel – encourage buffer strips
  - More rewards for biodiversity benefits
  - Waste water & sewage sludge application





# How scientists can help ?

- Lobbying Governments to stimulate policy changes
  - Provide evidence base
  - Lead to more direct schemes or fuller integration into existing ones (Renewable Heat Incentive, Carbon Reduction Commitment, Water Frameworks Directive etc)
  - **Reduce risk and maximise reward to growers**
- Dissemination of results
  - Enable best practice guidelines for growing, conversion and use
    - Contaminated sites
    - Irrigation with waste water
    - Application of sewage sludge
  - Useful for land owners as well as planners and regulators
  - **Increase opportunities and reduce regulatory burden**

# Contacts

## **Crops for Energy**

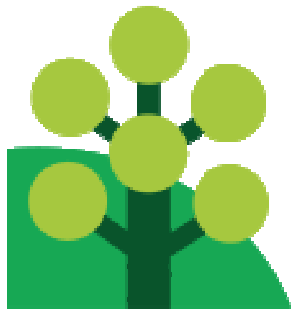
35 Beaconsfield Road, Knowle, Bristol BS4 2JE

Tel: +44 (0)844 2492901

E-mail: [kevin@crops4energy.co.uk](mailto:kevin@crops4energy.co.uk)

Web: [www.crops4energy.co.uk](http://www.crops4energy.co.uk)

Consultancy/ Training/ Plant supplies/ Turn key management options/ Green solutions



## **Crops for Energy**

