



Biofuel production potential of EU-candidate countries

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**BIO-ENERGY Enlarged Perspectives Workshop, DG RTD-EC,
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Target % shares of sold biofuels versus sold fossil fuels in the EU

Directive 2003/30/EC

- 2.00 % in 2005
- 5.75 % in 2010

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Background of the study

“Creating an EU market for biofuels will also offer an opportunity for the Candidate Countries. On average they have more agricultural land and less diesel and gasoline consumption per capita than present EU Member States. Growing crops for biofuels will facilitate the absorption of the agricultural sector of the new Member States in the Common Agricultural Policy.”

COM (2001) 547

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Goal and tasks of the study

Assessment of the agriculture-based potential
of CC to produce bioethanol and biodiesel
within 2005-2010

- Current potential (SNF)
- Optimal potential (OTP)
- Production costs OTP

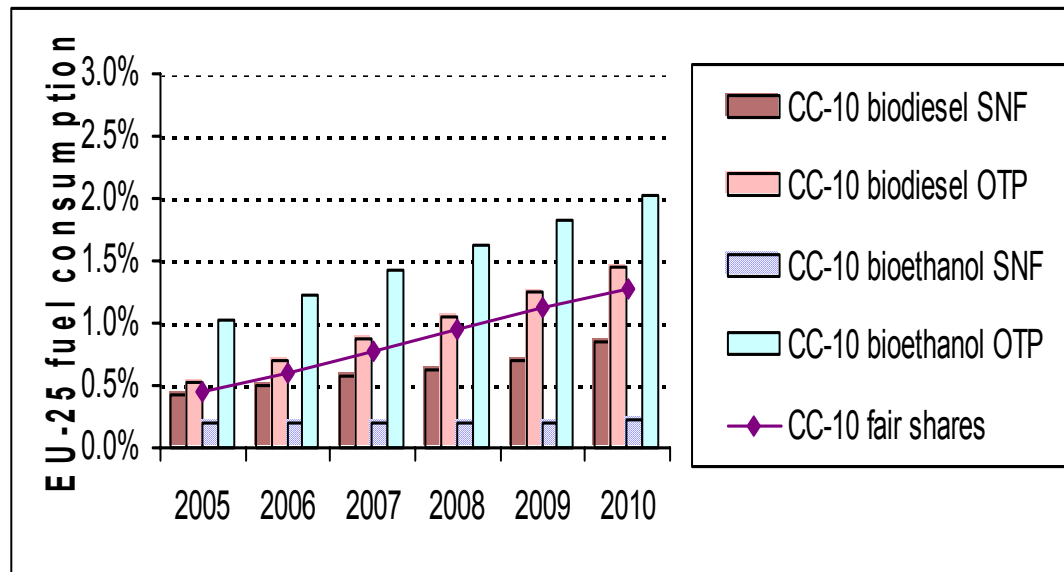
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Geographical scopes of the study



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SNF and OTP prospective biodiesel and bioethanol production of CC-10, compared to the biofuel targets for EU-25 and to the CC-10 fair shares in the EU-25 target shares



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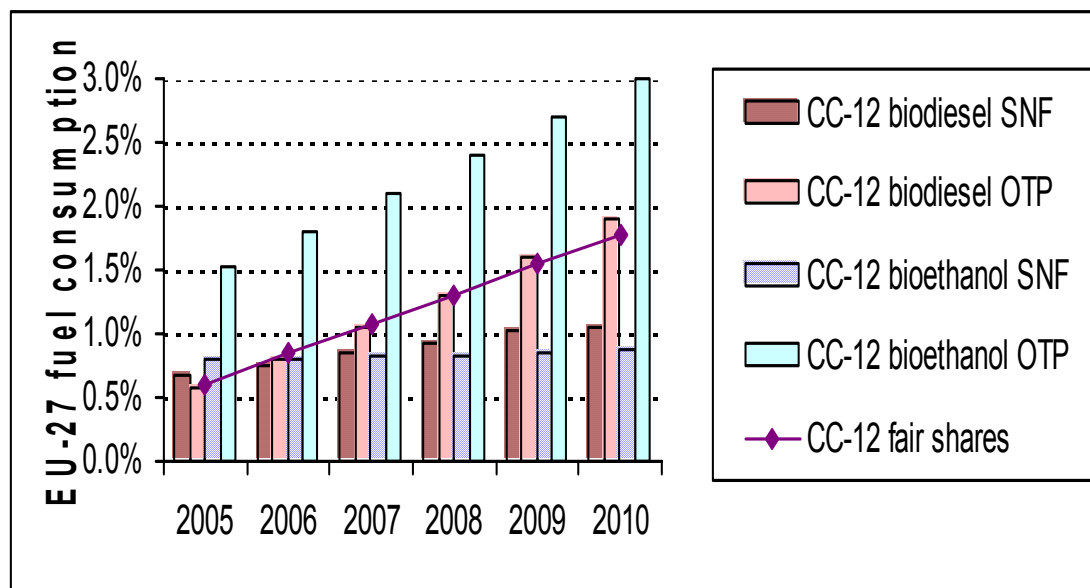
Key findings for the scope CC-10

Limited production potential:

- Land is standing idle because of poor quality of soil, but not due to economic reasons;
- Less favourable climate conditions for agriculture (CY, EE, LT, MT, SK) → imports for food purposes;
- Potential larger reserves for bioethanol rather than for biodiesel

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SNF and OTP prospective biodiesel and bioethanol production in CC-12, compared to the biofuel targets for EU-27 and to the CC-12 fair shares in the EU-27 target shares



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Key findings for the scope CC-12

Limited production potential:

- Land is standing idle for economic reasons
→ larger reserves for biofuel production,
compared to CC-10

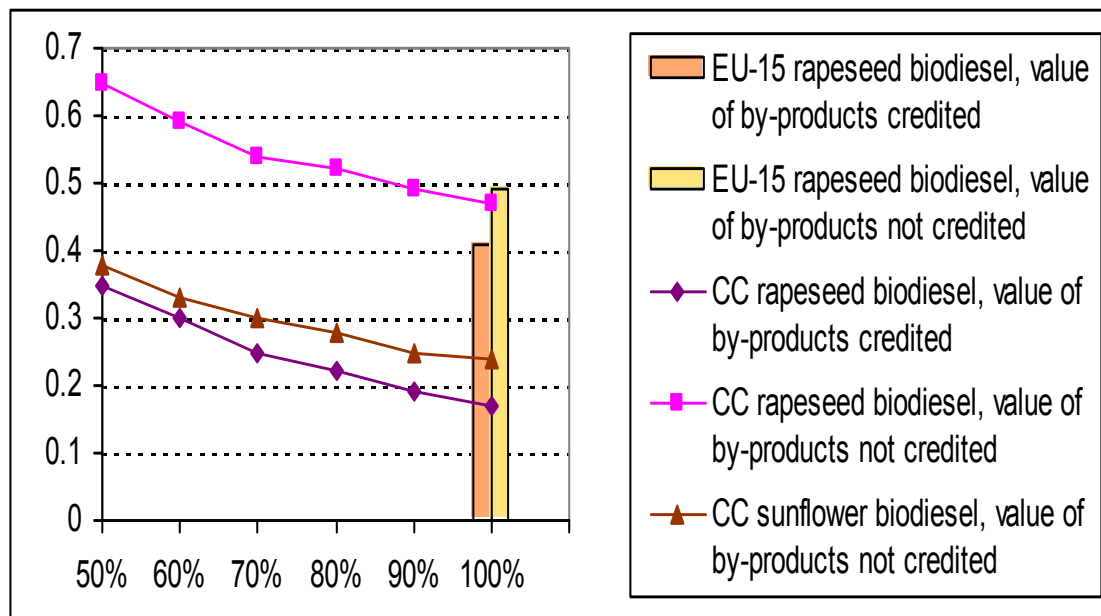
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Key technological hindrances to increase biofuel production in CC

- Rapeseed: Long crop rotation period (5 to 8 years), climate restrictions (Northern and Central Europe)
- Sunflower: Lower biodiesel yield per ha, climate restrictions (Southern Europe)
- Wheat: Competition with food markets
- Sugar beet: Competition with cheaper imports of products from sugar cane and molasse;

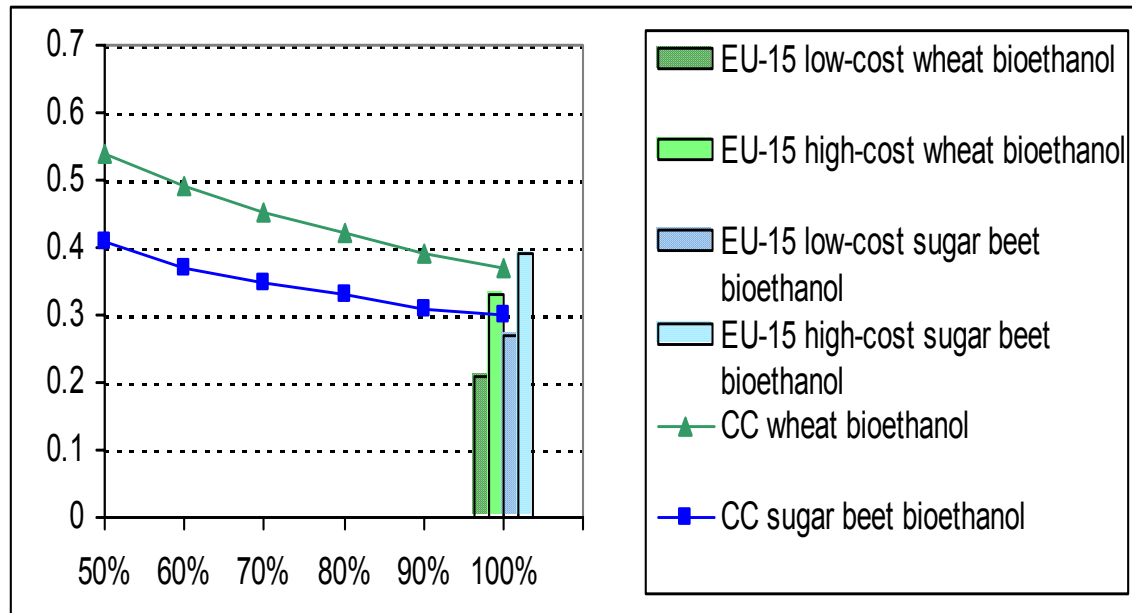
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Projected production costs (€/l) of biodiesel in CC, depending on crop yields per ha, as % of the corresponding EU-15 yield



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Projected production costs (€/l) of bioethanol in CC, depending on crop yields per ha, as % of the corresponding EU-15 yield



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Key findings concerning production costs of biofuels in CC

- Similar to the EU-15 production cost level;
- Larger uncertainty in projections

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Key conclusions of the study

- CC appear as a positive, but small complement to the enlarged EU biofuel production, rather than as a large reserve of supply;
- The extension of the enlarged scope of the EU from 25 to 27 would have a net contribution to the EU biofuel supply;
- Biofuel production costs in CC appear to be similar to the EU biofuel production costs;

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Thank you for your attention !

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Reports EUR 20835, EUR 20836

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