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## **DRAFT REPORT**

on the promotion of crops for non-food purposes  
(2004/2259(INI))

Committee on Agriculture and Rural Development

Rapporteur: Neil Parish

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## MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

### on the promotion of crops for non-food purposes (2004/2259(INI))

*The European Parliament,*

- having regard to the Green Paper of the Commission of 29 November 2000: 'Towards a European strategy for the security of energy supply' (COM(2000)0769),
- having regard to the Communication from the Commission entitled: 'Energy for the future: renewable sources of energy-White Paper for a Community Strategy and Action Plan' (COM(1997)0599),
- having regard to Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market<sup>1</sup>,
- having regard to the Communication from the Commission to the Council and the European Parliament on the share of renewable energy in the EU, in accordance with Article 3 of Directive 2001/77/EC (COM(2004)0366),
- having regard to Directive 2003/30/EC of the European Parliament and of the Council of 8 May 2003 on the promotion of the use of biofuels or other renewable fuels for transport<sup>2</sup>,
- having regard to Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC<sup>3</sup>,
- having regard to Regulation 1782/2003/EC of the Council of 29 September 2003 establishing common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers<sup>4</sup>,
- having regard to Decision 280/2004/EC of the European Parliament and of the Council of 11 February 2004 concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol<sup>5</sup>,
- having regard to its resolution of 29 September 2005 on the share of renewable energy in the EU and proposals for concrete actions<sup>6</sup>

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1 OJ L 283, 27.10.2001, p. 33.

2 OJ L 123, 17.5.2003, p. 42.

3 OJ L 350, 28.12.1998, p. 58. Directive as last amended by Regulation (EC) No 1882/2003 (OJ L 284, 31.10.2003, p. 1)

4 OJ L 270, 21.10.2003, p. 1. Regulation as last amended by Regulation (EC) 2183/2005 (OJ L 347, 30.12.2005, p. 56).

5 OJ L 049, 19.02.2004, p. 1.

6 Texts adopted, P6\_TA(2005)0365.

- having regard to Rule 45 of its Rules of Procedure,
  - having regard to the report of the Committee on Agriculture and Rural Development (A6-0000/2006),
- A. whereas renewable raw materials provide a clear example of the multifunctional role of agriculture and the contribution they can make to improving the environment and to the sustainable production of energy,
  - B. whereas, by replacing fossil energy sources, renewable raw materials contribute to the reduction of the EU energy dependence, minimising political and economic risks resulting from imports; whereas, at the same time, renewable raw materials contribute to the reduction of greenhouse emissions as well as a better management of the life cycle of materials,
  - C. whereas, over the next 30 years, oil production is likely to decline whilst transport demand will continue to grow, with the potential to increase the price of oil,
  - D. whereas, in rural areas, biofuels can create much more employment than fossil fuel alternatives,
  - E. whereas Directive 2003/30 on biofuels provides that by 2010, the target consumption of biofuel as a proportion of all transport fuel should be 5.75%, which corresponds to the equivalent of 40 million tonnes of carbon dioxide per year; whereas the level of consumption of biofuel in Member States is at present only 1.4% of total transport fuel; and whereas a substantial change in policy is therefore recommended,
  - F. whereas many Member States are relying on fuel tax exemptions to promote the production of biofuels, facilitated by the Directive 2003/96/EC<sup>7</sup> on energy taxation,
  - G. whereas an internal market for agricultural products for energy and fuel purposes is necessary,
  - H. whereas the cultivation of energy crops can positively impact on biodiversity, soil and water resources,
  - I. whereas not only consumers, but also farmers and forest holders need to be informed about the properties of non-food uses of crops, biomass production, renewable energy and the opportunities they provide for the farm and forest sectors,
  - J. whereas the recent CAP reform has created the conditions necessary for the development of non-food crops through decoupling, energy crops regime and set-aside land cultivation,
  - K. whereas biomass energy is a renewable source of energy with a huge potential, particularly for sustainable farming,
  - L. whereas the main forms of biomass energy include transport biofuels (made mostly from cereal, sugar and oil seed crops and waste oils); domestic biomass heating (using wood and wood residues); and the burning of wood wastes and straw in power plants to produce electricity, heat or both,

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<sup>7</sup> Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity ( OJ L 283, 31.10.2003, p. 51). Directive as last amended by Directive (EC) 2004/75/EC (OJ L 157, 30.4.2004, p. 1).

M. whereas renewable energy currently has prospects of comprising only 9 to 10% of the EU's energy mix by 2010 instead of the 12% target,

*A future for non-food crops*

1. Stresses the importance of increasing the support for research on a wide variety of technologies to prevent over-dependency on a limited number of potential bioenergy sources;
2. Welcomes the efforts already made by the Commission to promote further deployment of crops for non-food purposes via the setting up of a Biomass Action Plan and a Communication on Biofuels;
3. Stresses the importance of making the requirements in Directive 2003/30/EC on biofuels obligatory, with robust monitoring mechanisms in place and with the aim that the commitments undertaken be achieved primarily from local European production;
4. Points out the fact that rural areas have a comparative advantage in the production of biomass and calls on the Commission to make biomass production a priority in the structural and cohesion funds;
5. Urges the Commission to review the set aside arrangements under the energy crops scheme, as set out in the CAP reform, and to review the maximum area eligible for additional aid and the level of payment;
6. Stresses that the promotion of crops for non-food purposes must be financed adequately, to include the rational use of the rural development funds;
7. Highlights that, in the longer term, non-food crops must become economically viable and calls on the Commission to support the industry to move towards a position in which these crops will no longer need public subsidy;
8. Stresses the importance of encouraging the communication between the farming and the processing sector through the provision of clear contracts, technology translation and other incentives;
9. Asks the Commission to encourage grants and loan programmes at EU and national levels for purposes such as the construction of processing plants and the development of feedstock;
10. Asks the Commission to evaluate the potential benefits of non-food crops in terms of employment opportunities and reduced transport costs created by renewable energy plants being built in rural areas;
11. Stresses the importance of establishing measures to ensure a certain quality of imported feedstock and the compliance with environmental standards;
12. Urges the Commission to make further efforts to bring together product standards and support for renewables throughout the EU in order to promote an internal market for renewable energy sources;
13. Calls on the Commission to review and revise existing EU environmental and other legislation relating to the promotion of non-food crops in order to abolish all obstacles and ensure that it is properly promoted;

14. Encourages the establishment of an EU-wide monitoring system in order to ensure that biodiversity is not compromised by bio-based production of fuel, energy and materials;
15. Asks the Commission to consider developing a transparent, publicly available database at EU level, which includes life cycle benefits of renewable raw materials together with results from life cycle assessments;
16. Asks that public procurement strategies support introduction of materials derived from bio-based renewable raw materials in order to raise awareness of the potential uses of renewables and of their wider environmental and health benefits;
17. Urges the Commission to support the dissemination and technology translation of European research, development and demonstration on biomaterials, bioenergy and biofuels and to support a public awareness campaign;
18. Stresses the need for the integration of national research, development and demonstration activities into bio-materials at a EU level, particularly with regards to the establishment of an EU-wide research programme on technology for conversion of biomass into energy, fuel and chemicals;

#### ***Opportunities provided by speciality crops and products***

19. Calls on the Commission to take measures to encourage the production of speciality chemicals from agricultural raw material in order to increase farm income and to provide the market with environmentally friendly and healthy products;
20. Recognises that applications for speciality crops may remain mostly small-scale, and therefore benefit only a small percentage of farmers, and urges the Commission to encourage developments in this area with a view to a gradual increase in their production;
21. Encourages the recent developments made in the plastic, lubricant and insulation industry to replace conventional products by plant-based products;
22. Underlines the potential of agriculture to produce pharmaceutical crops for the production of vaccines and other products that aim to provide the medical industry with adequate instruments for health care;
23. Highlights that the increasing consumer demand for environmentally friendly and health-promoting products provides a challenge for the agricultural industry to produce raw material for natural and hypo-allergenic cosmetics and novel food products;
24. Calls on the Commission to encourage further innovation, promising new technologies such as the combined production of paper and bioethanol from straw;

#### ***Promoting the production of heat and electricity from agricultural resources***

25. Highlights the potential offered by using agricultural residues and waste for the production of heating, cooling and electricity, which are already economically and environmentally efficient and beneficial;
26. Asks the Commission to promote the growing of willow and miscanthus in all parts of the EU for biomass power to produce heat in such a way that growers may use human waste products on the land so as to simultaneously create an energy crop and aid waste management;

27. Stresses the importance of setting obligatory requirements for renewable heat generation that will stimulate the efficient use of biomass as a renewable energy source and the development of new local markets for agricultural products;
28. Calls on Member States to use effective incentives, such as tax cuts and duty reductions, in order to promote the use of renewable energies and raw, renewable, local sources for their production;
29. Suggests to further promote efforts at farm level, that have already been made by many small-scale processors, to produce and use renewable energy directly on-farm;
30. Encourages the establishment of biorefineries that increase the cost efficiency of the final products by the integral use of biomass;

### ***Opportunities for biofuels***

31. Highlights that the replacement of fossil fuels can lead to economic opportunities and the creation of jobs in line with the Lisbon Strategy;
32. Urges Member States to consider measures such as further tax incentives, a fixed amount of biofuel to be blended with fossil fuels and obligatory requirements as promising ways to promote biofuels in the future;
33. Urges Member States to put in place taxes and duties for sufficiently long periods of time so as to ensure industry confidence and to stimulate investment;
34. Asks the Commission to consider putting in place tariffs on cheap biofuel imports from third countries such as Brazil, as the United States has done, so as to allow the biofuel industry in Europe to remain competitive;
35. Calls for increased research funding for new and more cost-efficient technologies and for the development of cultivars that are better adjusted to the needs of the biofuel industry;
36. Recommends that research and development into second generation biofuels should be given substantial support;
37. Acknowledges that biofuels are more expensive than fossil fuels but points out that the mixing with mineral oil has a positive impact on the environment;
38. Calls on the Commission to rapidly propose a revision of Directive 98/70/EC relating to the quality of petrol and diesel fuels so as to determine the adequate means to facilitate the realisation of the objectives of Directive 2003/30/EC on biofuels and thereby to promote biofuels further;

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39. Instructs its President to forward this resolution to the Council and Commission.

## EXPLANATORY STATEMENT

The main goal of the promotion of crop production for non-food purposes is to provide important new markets for farmers in the European Union. Developing this sector has the potential to bring enormous social, economic and environmental benefits.

The European farming sector today is under increasing pressure, with globalisation and liberalisation of national and international markets making it very difficult for European farmers to compete with countries producing at a lower cost. As this trend continues, farmers will find it more difficult to forge a decent income and the least competitive producers will be forced out of the sector. This will not only have major economic and social implications but will also lead to a decrease of land used for food production.

It is within this context that the promotion of crops for non-food purposes provides major opportunities.

### **Land use**

As the agricultural sector continues to develop, more land will become available for non-food uses. Agriculture nowadays does not only have an economic and social value but also an environmental and ecological importance. The loss of agricultural land would therefore be to the detriment of the environment. If the land could keep its agricultural destiny by using it for the production of crops for non-food purposes, these ecological benefits and our natural heritage would remain.

### **Current provisions: CAP reform**

The decoupling of income support from production introduced by the 2003 CAP reform will help to facilitate the supply of energy crops. In particular, crops that were eligible for direct payments only under the non-food regime on set-aside areas may now be cultivated on any area without loss of income support. Under the new system farmers are, in principle, able to adapt their production system to agronomic conditions and market developments, without any impact on the amount of income support they receive. It will be the net margin of the different crops at local level that will determine their production programme.

The decoupling system also provides for special provisions for some crops (e.g. starch potato, durum wheat). To receive this payment, farmers must comply with a number of good agricultural and environmental practices. The maximum area eligible for support is fixed per region and it can vary within the region, depending on the irrigation, the specific crop concerned and average yields. In addition, Member States are allowed to contribute national aid up to 50% of the total costs associated with establishment of multi-annual crops for biomass production on set aside land.

### *Set aside land*

The set-aside obligation, which was introduced with the 1992 reform as a tool to balance the cereals market, has been integrated into the new single payment scheme. Set-aside land can normally not be used for any type of production, but the cultivation of non-food crops (including energy crops) is authorised if the use of the biomass is guaranteed either by a contract or by the farmer himself. The set-aside regime therefore constitutes an incentive for the cultivation of non-food crops.

### *Energy crops scheme*

The production of fuel and energy crops is promoted not only through the set aside payment, but also through the Energy Crops Scheme, which provides a per hectare support for producers on non set-aside land. The maximum guaranteed area is 1.5 million hectares and a premium of € 45 per ha is available. Payments are established for two main energy crops: short rotation coppice and miscanthus. In the first year of implementation of the Energy Crops Scheme, 2004, only 300.000 ha (20% of the maximum guaranteed area) were used for this purpose.

### **Greenhouse effect**

The protection of the environment has also become an important part of today's policies, including the agricultural policy. By implementing the Kyoto Protocol, detailed rules have been laid down, for example, a target emission rate per Member State was set to achieve an average of 8% decrease in greenhouse gas emission within the EU. The cultivation of biomass, for example, can contribute efficiently in decreasing the greenhouse effect, which is primarily caused by CO<sub>2</sub>, by buffering the CO<sub>2</sub> emission. Afforestation programmes and agroforestry systems always have been and still are providing the best results in combating the greenhouse effect. The establishment of forests on agricultural land is already promoted within certain policies and needs to be kept that way.

### **Renewable energy**

The European Parliament recently recognized the potential of renewable energy as an important means to boost employment and create regional added value in rural areas, thus conforming to the Lisbon and Gothenburg strategies.

### *Renewable energies in general*

Renewable energy is a general term used for many different kinds of energy, such as renewable electricity, heat and biofuels which are all derived from sources that are inexhaustible, unlike conventional fossil fuels. Examples of renewable sources are wind, solar energy, wood, waste, oilseed rape and other crops and products derived from crops grown for non-food purposes.

The production of renewable energy needs to be promoted within the European Community, especially in the context of sustainable development but also to decrease dependency on conventional fuels, such as petrol. Several current technologies, like energy derived from biomass, are economically viable and competitive.

The European Commission set out a target of 12% of renewable energy consumption in their White Paper on renewable sources of energy (COM/2001/69). Recently, the Parliament adopted an initiative report on renewable energy in this context. Within their opinion the Committee on Agriculture and Rural Development stressed that the production of renewable energy, to which the CAP has contributed, needs to be further developed and the use of renewables needs to be encouraged:

*"It is indispensable to increase the possibility of the co-funding of investment schemes by the European Agricultural Fund for Rural Development and the other Structural Funds so as to ensure the balanced and rational development and use of renewable energy, provided the energy and environmental outcomes of this use prove positive and compatible with sustainable production methods."*

The Parliament also asked the Commission and the Member States to intensify their efforts in order to meet the target of 12% renewable energy consumption as early as possible.

### *Biomass Action Plan*

The area within the EU-25 eligible for support for cultivation of non-food crops either under set-aside or under the Energy Crops Scheme will total 8 million hectares in 2005, rising up to 9.4 million in 2011. This includes the maximum area allowance in the Energy Crops Scheme and the 30% increase in voluntary set-aside. In order to meet the EU targets for renewable energy and biofuels, it has been estimated that 6.5 million hectares will need to be devoted to solid fuel energy crops, and at least a further 6.6 million for biofuels. The total of 13.1 million hectares needed is 3.5 hectares more than the area that is predicted to receive support.

Currently, the European Commission is drawing up a proposal for a Biomass Action Plan expected to come out at the beginning of next year. This initiative will address the problem stated above. One of the other issues that will be addressed is the reason why the Energy Crops Scheme is not used sufficiently.

### *Biofuels*

Another possibility provided by the growth of crops for non-food purposes is the production of biofuels from starch potatoes, cereals, sugar beet, rapeseed and others. The major markets for biofuels are biodiesel and bioethanol, the first is a substitute for diesel and derived mainly from rapeseed oil, the second is a substitute for petrol and can be derived from many carbohydrate sources.

Today, the EU is the world leader in developing novel technologies for biodiesel production and use. Within the bioethanol industry, the EU has to compete with cheap bioethanol producing countries like Brazil, which implemented a national programme of fuel alcohol ("proalcool") in 1974. Another issue with the current EU bioethanol technologies is that, above a certain percentage of ethanol mixed with petrol, there is an increase in NO<sub>x</sub> and aldehyde emissions, which are highly pollutant in terms of air quality and thus larger greenhouse gas emission savings could cause environmental damage.

Directive 2003/30/EC on biofuels sets targets for the market share of biofuels on the energy market: 2% in 2005 to increase until 5.75% in 2010. At present, biofuels contribute less than 1% of the fuel consumption in the EU. The European Commission is currently working on a Communication on biofuels which is expected to have both an agricultural perspective and an international perspective and may make the link with the adjustments of the Directive 1998/70/EC on fuel quality, which are being reviewed during the first half of 2006.

In order to achieve the targets as set out in the Directive 2003/30/EC on biofuels, different strategies could be followed. One way to promote the cultivation of crops for non-food purposes is to make the biofuel targets obligatory. This strategy is supported by many stakeholders in the public consultation on the Biomass Action Plan. Another strategy is based on the fact that by creating a demand for biofuels, the supply will follow. This can be created through tax exemptions, which are already used in Germany, or through support for setting up local biofuel production units, linked to local crop production, within the rural development context. We must also consider whether we need to add a tariff to cheap fuels (for instance bio-ethanol from Brazil) in a manner not dissimilar to the United States.

Finally, the support for biofuel technology research should not only be focussed on first generation biofuels (the biofuel technologies currently being used) but also for novel biofuels (second and third generation) such as syngas based biofuels, and lignocellulosic ethanol.

Furthermore, the energy conversion efficiency and the cost efficiency can be significantly increased by stimulating research and development of novel technologies and the improvement of existing technologies.

### **Oil crops**

Most of the vegetable oil is consumed by food markets but there are also important industrial applications: detergents and surfactants, lubricants, paints, solvents, polymers and linoleum, to name just a few. All of these products can be derived from 4 main crops: oilseed rape, soya, sunflower and linseed.

The future use of biolubricants, in particular, is predicted to increase by up to 20% in the next few years. The opportunities to improve the oil content through plant breeding or biotechnology are not yet fully exploited. The main problem in the oil sector is the competition with cheap alternatives (mainly imports), for example palm oil. The cheap production of palm oil in Indonesia has also caused many environmental problems. Possible competition from within the biodiesel market might also reduce the potential future use.

### **Carbohydrate crops**

At present, the most important non-food products derived from carbohydrate crops are: paper, biodegradable polymers, adhesives, glues, agrochemicals, detergents and paints. Wheat, maize and potato are the three main carbohydrate sources in the EU.

Currently 3.6 million tonnes of cereal production per year is used for this purpose and the amount is expected to increase to 5.5 million within the coming 5 years. Although this accounts for only a few percentages of the yearly EU area devoted to cereal production, it can provide high value market opportunities to farmers.

### **Speciality crops**

Pharmaceuticals, medicinal, flavours, biocides and fragrances are provided by the cultivation of such crops as mustard, poppy, sesame, thyme, rosemary, lavender and mint.

These crops are grown on a very small scale but they can provide a high return for farmers. Because of the high quality of products produced in the EU compared to other countries, the competition with cheaper products is less significant.

Finally, industrial and special (non-food) uses of crops can help to add on farm value and some of these uses additionally provide environmental benefits. Biodegradable plastics are only one of the many examples that have huge opportunities for increased future use.

### **Research and technologies**

In the report on the share of renewable energy in the EU and proposals for concrete actions, the Parliament asked the Commission to take new regulatory measures and to increase the Union's financial support for research into renewable energy sources, innovation spreading, information sharing and energy economies. Producers also need to be supported so that they can obtain the appropriate technology by taking part in the relevant national and Community programmes. The Parliament drew attention to the fact that encouraging a greater use of biomass in the production of a renewable form of energy using sustainable production methods must not be an excuse for the European Union not to pursue research aimed at achieving greater energy efficiency and any potential means of lowering the financial burden on farmers.

### **Final remarks**

Six years ago, the European Commission and the Economic and Social Committee stressed the need to develop a centralised non-food policy. The main reason to develop one consolidated policy is to be able to meet the future needs as we seek to use more renewable energy. Current production is discouraged (or at the very least not encouraged) by a number of EU legislations. It has been suggested several times by the European Parliament that the Commission should put more emphasis on the removal of administrative and network-specific obstacles in the Member States and on the creation of attractive encouragement schemes instead.

In order to decrease the competition against European raw agricultural material from cheap imports and other feedstock at the processing level, quality standards must be introduced. Agriculture within the EU generates very high quality, traceable and increasingly safe products in comparison to other countries. This is a comparative advantage that can and must be exploited further by implementing minimum quality levels on imported products.

Finally, there is wide support to promote the cultivation of crops for non-food purposes by making the renewable energy targets obligatory. This will not only be of benefit to the environment but the obligation to comply will also make it easier for Member States to focus a larger amount of their agricultural support on the production for non-food purposes, which will eventually lead to a more sustainable future for the agricultural sector.

#### **Final comment from the Rapporteur**

The Rapporteur would like to express his thanks for the input from the other Members, and, in particular, for the fact-finding missions to Austria, Denmark, France, Germany and the UK which have proved extremely useful in drafting this report.