

to waive the obligation for grant recipients to declare the state of their finances, when the thresholds set — particularly for the cases covered by Article 173 — are far too high. The aim should always be to strike the **right balance between the expected benefits** (savings in time and money for both the Commission and the public) and **the potential costs** (loss of public money, calculated in terms of the probability and size of the risk).

4.7 The criterion of **caution and risk assessment** mentioned in point 4.6.1 above has, moreover, already been adopted with regard to **pre-financing**: a **guarantee** (surety or other form of guarantee) is **required** as a general rule for *all* pre-financing with a *value equal* to the grant, and for any pre-financing *exceeding 80 % of the amount of the grant and above EUR 60 000*.

4.7.1 The EESC believes that the above provision is based on the sound principle of caution as referred to in point 4.6.1, but wonders whether these criteria might not also have been applied to genuine grants (e.g. the cases cited in point 4.6),

given that, **in terms of actual risk, the difference between pre-financing and grant** is very often — with a few, sometimes significant exceptions — more administrative than real.

4.8 Article 165 introduces a criterion which is entirely acceptable but has not always been applied in the past: where the recipients of grants are **bodies which pursue an aim of general European interest**, the Commission is **entitled to recover the percentage of the annual profit** corresponding to the Community contribution to the budget of the bodies concerned. This provision only applies in cases where the rest of the body's budget is **financed by Member States' authorities** which are themselves required to recover their share of the profits.

4.8.1 The EESC fully endorses this provision but finds it difficult to believe that the text as it stands can be intended to imply that the Commission should not also be entitled to recover profits in cases in which the rest of the budget is financed not by public authorities but by private entities.

Brussels, 15 March 2006.

The President
of the European Economic and Social Committee
Anne-Marie SIGMUND

Opinion of the European Economic and Social Committee on Regrowing raw materials — development outlook for producing materials and energy

(2006/C 110/10)

On 14 July 2005 the European Economic and Social Committee, acting under Article 29(2) of its Rules of Procedure, decided to draw up an opinion on *Regrowing raw materials — development outlook for producing materials and energy*.

The Section for Agriculture, Rural Development and the Environment, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 27 February 2006. The rapporteur was Mr Voss.

At its 425th plenary session, held on 15 and 16 March 2006 (meeting of 15 March), the European Economic and Social Committee adopted the following opinion by 95 votes to 19, with 15 abstentions.

1. Conclusions and recommendations

1.1 The relaunch of the Lisbon strategy has established sustainability as a primary objective of EU policy. The EESC believes that this own-initiative opinion on regrowing raw materials could act as a spur to progress in key areas:

- a sustainable, environment-friendly raw materials base with jobs in Europe's regions;
- making Europe a dynamic, knowledge-based economic space with high-potential technologies responding to rising global demand;

— the increasing demands for sustainable solutions in the context of security and development policy;

— security of supply and diversification of raw materials in the EU;

— sea change in the use of raw materials as a strategy for protecting the climate, whilst, at the same time, safeguarding biodiversity.

1.1.1 Even against the background of an increasing use of regrowing raw materials, economical and efficient use of raw materials will continue to represent the key challenge for the future development of all sectors.

1.1.2 The Committee recognises the high level of effectiveness in terms of employment of establishing a regrowing raw materials industry in the regions; it also recognises the need to develop an appropriate policy to provide employees and users in all areas connected with the production and use of regrowing raw materials with the requisite skills and further training.

1.2 The Committee realises that many different units in the Commission are addressing this issue from their own perspectives, but it regrets the lack of a clear **coordinating point** or task force for this EU policy area. It therefore calls on the Commission to carry out a reorganisation to give the policy for regrowing raw materials a clear sense of direction.

1.3 The **decoupling** of direct payments under the Luxembourg agricultural reform agreement of 2003 and the EAFRD Regulation, as well as the future approval of sugar beet as a regrowing raw material, provide an important basis for wider cultivation in Europe.

1.3.1 When it comes up for review in 2006, modifications should be made to the energy plant premium in respect of the following points:

- possibility for applications for the premium also to be made in the new Member States which use the simplified CAP procedure,
- separate possibility of obtaining the premium for locations not eligible for the payment as a result of the transformation process,
- administrative simplification,
- amount of the premium.

1.4 The Committee expects high allocations to be set when earmarking aid from the **Structural Funds** for this sector's economic development.

1.5 The 6th Framework Programme largely neglected **research and development** in the sphere of technologies for regrowing raw materials. The EESC therefore calls for specific actions in the 7th Research Framework Programme for the development of regrowing raw materials and their material applications, as well as funds for developing energy from biomass. This will require a considerable increase in funding.

1.6 The Committee points out that, at the present time, it is **not the volume of supply** of regrowing raw materials which

are or could already be produced which is the limiting factor in the development of this sector. It is rather the **level of processing technologies** in respect of the products which could be marketed which is lagging behind.

1.7 The Committee welcomes the EU **Biomass Action Plan**, but regrets that it does not cover the production of materials but only of energy from biomass, and awaits assessment of the Action Plan and moves to establish national and regional action plans.

1.7.1 In the case of renewable sources of energy, particularly biomass, most EU Member States are failing to adequately exploit potential resources, because the general legal conditions are inadequate. The Committee therefore calls upon the Commission and the Council to produce a more effective policy in this regard.

1.8 The Committee explicitly supports EU **target-setting** for the share of renewable raw materials sources. It recommends 4 x 25 for 2020, or 25 % of electricity, heating, fuels and new materials, such as compound materials, natural fibre reinforced plastics, or other petrochemical products.

1.9 The Committee stresses the crucial importance of developing and implementing effective **market launch measures** for all applications (electricity, heating, fuels, and materials production). The energy-saving laws of certain Member States could serve as models of success here. It is important for measures to have the necessary flexibility to provide security for investors and incentives to employ new technologies, whilst taking account of differing background situations with regard to, for example, technology and economies of scale.

1.10 As regards identifying **policy approaches and political obstacles**, the opinion addresses several other points: emissions and waste legislation, the packaging and end-of-life vehicles directives, tax law, standards and the organisation of the market in fibre plants. The REACH Regulation on chemicals provides new perspectives for biomass-based procedures. Complex political and administrative obstacles exist in the 25 Member States owing to differences in policy implementation and systems. The Committee calls on the Commission to identify political obstacles and propose solutions.

1.11 The Committee sets out cultivation **requirements** with respect to **competition for land use** with food plants, energy and the ecobalance, as well as nature, environmental and landscape protection. It proposes the introduction of an accreditation scheme under which the origin of products and the processing they have undergone are indicated.

1.12 **On the international front**, the opinion points to opportunities for the EU to export technology. At the same time it calls for the WTO rules governing the international trade in biomass fuels to take into account, in particular, food sovereignty, and environmental and social standards.

1.13 The Committee will address the European Commission's Biomass Action Plan in a separate opinion.

2. Explanatory statement (background and overview of the situation regarding a regrowing raw materials base)

2.1 **Aims of EU policy:** In the context of relaunching the Lisbon strategy and applying sustainability criteria, forward-looking stimuli to progress are lacking in the following key areas:

- a sustainable, environment-friendly raw materials base with jobs in Europe's regions;
- making Europe a dynamic, knowledge-based economic area with forward-looking technologies responding to global demand;
- the increasing demands for sustainable solutions in the context of security and development policy;
- the achievement of greater economic independence by ensuring supplies of raw materials and by means of raw-material diversification on a European level;
- switch-over of basic raw materials as a means of climate protection, whilst at the same time safeguarding biodiversity.

The aim of this own-initiative opinion is to set out important aspects from the perspective of civil society.

2.2 **Definition:** Regrowing raw materials are defined as materials produced by agriculture, forestry and fishing that are also put to use in the non-food or non-feed sectors. This area thus embraces all substances created by photosynthesis and subsequent biological processes, i.e. stored solar energy. Biomass can be used as a material or as energy.

2.3 **History:** Production of regrowing raw materials is one of the main agricultural activities in addition to production of food and feedstuffs. These agricultural products began to be displaced with the Industrial Revolution. It was not until the middle of the twentieth century that petrochemical products replaced biomass-based products to a substantial degree. With traditional knowledge supported by new technologies and creative science, a wide range of new applications are available today in the spheres of energy, pharmaceuticals, chemicals, the construction industry and transport.

2.4 **Global resource policy framework:** The economies of the EU Member States are acutely dependent on fuel and raw materials imports from all over the world. Increasing consumption of and dependence on fossil raw materials, including crude oil and natural gas, though also coal, is becoming unsustainable and has many negative effects

2.4.1 The lack of innovative developments and investment with a view to achieving a sea change in the use of raw materials in the industrialised countries can be put down to the pursuit of one-sided policies. The dramatic side-effects of dependence upon fossil fuels do not comprise only ecological damage and global climate change; external and security policy risks also arise.

2.4.2 The consequences of global climate change, energy price hikes and a lack of efficient alternatives are further aspects of the misguided developments which have brought about, *inter alia*, poverty in the developing states.

2.4.3 EESC documents have dealt in considerable detail with the drama of climate change, the worldwide difficulties in implementing the Kyoto Protocol and the high expectations and limited results of the Montreal climate change conference. Everywhere and every day, calls are being made for European and international solutions to be found.

2.5 **Regrowing raw materials** are a continually renewable source of raw materials and energy. By contributing towards a positive eco-balance, they can reduce pressure on the environment, in particular damage caused by CO₂ enrichment. They provide potential for regional economic and value-added chains. They help to create and keep jobs in rural areas in the EU; in these areas and in the upstream and downstream sectors of both agriculture and forestry they can stimulate new economic dynamism. They can make crop rotation more flexible, thereby helping to safeguard biodiversity. By virtue of their innovation potential, they have a wide range of applications and offer a broad substance base for chemical products.

2.6 National policies in the EU respond to the changing raw materials situation

Many European countries have renewable energy laws to promote feed-in of electricity produced on a renewable basis. The feed-in price will be set higher on the basis of various technological and economic criteria. This leads to wide production and marketing of new technologies, and cost reduction as a result of extensive business experience and perfected technologies. However, as is clear *inter alia* from Commission Communications COM(2005) 627 and 628, there is considerable work to be done in many European countries to provide effective incentives for development and market launch.

2.7 Worldwide policies: Renewable raw materials are becoming increasingly important in various cultures and countries, especially in rural regions. Political and economic initiatives include the ethanol programme in Brazil, and trials with jatropha (an oil plant) in the arid regions of India and Africa. But there are also some alarming trends in South East Asia and South America, for example, where forested areas are being destroyed to satisfy the increased worldwide demand for fuel oils. This has a very adverse effect on more than just the climate. The United States is planning a long overdue shift in its energy policy. It wants to produce 20 % of fuel and 25 % of chemicals from biomass by the year 2030. The president and Congress are now establishing the biomass sector as a cornerstone of the US economy by means of the energy security law.

2.8 Renewable raw materials in the work of the EU: the subject is being addressed from different perspectives by over ten different DGs in the European Commission. The most important work is being done in the Agriculture DG and Transport and Energy DG. But Enterprise, Industry, Development, Research, Regional Policy, Trade, Competition and Taxation are also involved in this area. And the European Environment Agency in Copenhagen is making a substantial contribution.

2.8.1 EU initiatives for developing regrowing raw materials include:

- Directive 2001/77/EC on the promotion of electricity produced from renewable energy sources;
- Directive 2003/30/EC on the promotion of the use of biofuels;
- Directive 2003/96/EC on taxation of energy products and electricity;
- Directive 98/70/EC on quality of fuels;
- European Commission White Paper calling for a doubling of the share of renewables by 2010;
- reform of the market organisation in fibre plants;
- use of set-aside land in the EU since 1992 for cultivating non-food raw materials;
- Luxembourg agricultural reform agreement: set-aside with cultivation option maintained, decoupling in principle allowing free choice of plants without loss of direct payments, and new coupled aid for 1.5 million hectares of energy crops;

- the EAFRD Regulation (rural development) also provides for promotion of this policy area;
- Structural Funds;
- 6th Research and Development Framework Programme.

Most recently, the Commission issued the following on 7 December 2005:

- Biomass Action Plan (COM(2005) 628);
- Communication from the Commission: The support of electricity from renewable energy sources (COM(2005) 627).

The European institutions are currently making decisions on the following:

- EU strategic guidelines on rural development;
- recognition of sugar beet as an energy crop under the new sugar market reform;
- 7th Research and Development Framework Programme;
- Commission Communication on biofuels (2006);
- REACH chemicals directive (with new prospects for the use of regrowing raw materials, particularly to substitute other materials).

3. General comments

3.1 The EESC would, however, stress that the basic significance of regrowing raw materials has to do with the sustainability of national economies. It also notes that the energy value of key agricultural products is now higher than their food or feed value. Without intending to start a debate about values, the energy price now often determines the minimum level of prices for agricultural products. This opens up new alternative options in the field of material and energy applications and, in particular, makes it necessary to develop and introduce new technologies.

3.2 Integrated land use: The EESC recognises that there is competition for land based on different demands: food; the need to safeguard biodiversity; nature and environmental protection; feedstuffs and non-food raw materials. This competition differs considerably from region to region and this trend is set to continue. The amount of land available for these crops likewise differs to a large extent from region to region.

3.2.1 **Productivity gains** and declining food consumption in the EU are expected in the medium term to release a further 13.7 million ha of the 104 million hectares of arable land. To this should be added the amount of land presently being 'set aside' under the CAP. Current consumer patterns for processed animal products mean that a large proportion of Europe's arable area is, at the same time, required for feedstuff production.

3.2.2 But from Europe's point of view, land and forest areas are also limited. Europe is the world's biggest importer of foods and feedstuffs. The EESC is very concerned about the global **loss of arable land**. Each year some 7 million hectares of agricultural land is lost worldwide, and 25 % of all cultivated land is classified as endangered. In 1970 there were still 0.18 hectares per capita available, but today the figure is just 0.11 hectares. This situation is exacerbated by the major uncertainties brought about by declining global yields and shortfalls in yields brought about by climate change.

3.2.3 The Committee concludes that there is a need to pay considerable attention not just to bringing about increased yields but also, and in particular, to the efficient use of lignocellulose plants, such as grasses and woods, and agricultural by-products, such as straw. By-products of substance cycles, e.g. manure in biogas plants, should still be used for energy production. New, exacting demands should be made in respect of the development of more efficient processing and conversion technologies. It is in these areas that the greatest challenges are now arising; these challenges must be taken on board as an integral part of EU R&D policy.

3.2.4 The Committee notes that **the new Member States of central and eastern Europe** have a high proportion of agricultural land. They also receive a large share of Structural Fund allocations. This provides a good basis for EU and national policy to establish investment and innovation incentives for regrowing raw materials. The EESC calls urgently on the EU, and in particular on the Member States, to ensure that appropriate legislation and planning measures provide for significant Structural Fund resources to be earmarked for regrowing raw materials.

3.2.4.1 In some Member States the restructuring process has left large tracts of agricultural land unused. The Committee draws attention to the fact that their cultivation is less competitive as payments cannot usually be claimed for them under the CAP. The Committee urges the Commission, the Council and the Member States to explore the possibility of targeting Structural Funds in order to enable this type of land to be used in such a way as to bring structural benefits and promote employment in the regions.

3.2.4.2 The energy plant premium (45 euros/ha) for 1.5 million ha, decided upon as part of the Luxembourg agricultural reform agreement of 2003, comes up for review already by the end of 2006. The EESC calls upon the Commission to consider whether the amount of the premium is adequate. The EESC takes the view that the current procedure for applying for the premium is too bureaucratic and proposes that administrative adjustments be made as a matter of urgency. As things stand, no applications for the premium may be made in the new Member States which have opted for a simplified CAP procedure (8 out of the 10 new Member States). As part of the adjustments to be made with effect from the end of 2006, the EESC calls for these Member States, too, to be given the possibility of having access to this area payment. As regards the amount of the premium, a separate adjustment should be made for those locations which, as a result of the transformation process, are not entitled to receive payments.

3.3 Regional value-added — creating new jobs

3.3.1 In order to strengthen the local economy in rural areas, the EESC believes it is necessary for initial processing stages in particular to remain local as far as possible. Decentralised technologies provide great potential for developing and strengthening the regions in this respect, the aim being to reduce transport costs for biogenic raw materials and increase value-added in the region by refining and processing substances locally. Such regional economic cycles maintain jobs in agriculture, as well as creating new ones in downstream sectors.

3.3.1.1 A 5 % rise in the share of renewable fuels by 2010 would create between 250 000 and 300 000 jobs — mostly in rural areas — in the biomass field alone, assuming 70 % to 90 % of it was produced in Europe. Labour intensity in the biofuel sector is 50 to 100 times greater than that of fossil fuels, in electricity from biomass 10 to 20 times greater and in heat production double. In this latter sector, a very large number of additional jobs would, however, be created as a result of the conversion and construction of heating systems; in many regions the greatest impact on jobs is therefore likely to occur in the field of heat production. The Mitre Synthesis Report of 2003 established that, if the EU were to adopt an ambitious raw material strategy based on renewable sources of energy, almost 2.5 million net additional jobs would be created by 2020 in EU-15 alone. It was forecast that two thirds of those new jobs would be created in the biomass sector. The Committee therefore highlights the major employment potential of the biomass sector, provided that appropriate incentives are put in place to take account of the higher costs that can be anticipated. Strongly forward-looking, but stable, conditions must be provided for.

3.3.1.2 These favourable prospects for employment will also benefit rural regions in particular. There is, on the one hand, a new need for highly skilled employees, particularly in the fields of R&D. The numbers involved are estimated at around 400 000. There is also a need for employees having lower or fewer initial qualifications. Overall, there is a need for a wide range of new training and qualification measures for both producers and users in all fields.

3.3.1.3 The Committee also draws attention to the fact that in the areas of research, universities, industry, crafts, agriculture, administration, media and consumers, there is a need to step up the provision of training and further training in respect of renewable raw materials.

3.3.2 With a view to structural change in rural regions, as for example under the current reform of the market organisation for sugar, the Committee urges that available commercial and industrial potential be harnessed and geared towards the use of regrowing raw materials. EU restructuring funds are a suitable instrument for supporting adjustment and the Structural Funds for redeveloping production sites. The EESC regrets that use of Structural Fund resources is not conditional on innovative and employment-friendly plans for such sites.

3.4 Use of regrowing raw materials in cascade systems

Regrowing raw materials can be used to produce both materials and energy. Alternative uses must observe the cascade principle. Use for materials production is therefore to be considered ahead of use for energy. 80 % of oil and 59 % of biomass is currently used in the processing systems. Under the cascade principle, the order of use would be as follows: foods; production of materials of appropriate quality; secondary raw materials, raw materials for energy production or even feedstuffs (oilseed cakes); low-energy raw materials with lignocellulose breakdown; fertiliser.

3.4.1 Use of regrowing raw materials to produce materials

The EESC sees many potential applications for regrowing raw materials in the production of materials. Between 1996 and 2003 the quantity of natural fibres used in the German motor-vehicle industry increased from 10 000 t, to 45 000 t. Wood and natural fibres are used to make building materials, allowing bio-construction and energy savings. Biodegradable lubricants based on plant oil help to reduce environmental damage.

Regrowing raw materials provide basic ingredients for washing and cleaning products, varnishes and textiles. In car manufacturing the use of wood and natural fibres enhances recycling properties, and the weight of the materials used can be reduced. Long-lived and short-lived plastics based on regrowing raw materials also open up completely new perspectives for waste recycling, since so-called biodegradable materials can be composted and — as a better option from an energy standpoint — thermically, or thermically and electrically (through biogas plants) processed. The main ingredients of biodegradable materials are starch plants and sugar, oil and lignocellulose. The amount of such materials used worldwide has increased since 1995 to reach a total of 350 000 t., deriving almost exclusively from regrowing raw materials.

3.4.1.1 In the Committee's estimation, the building industry offers many opportunities for developing new applications of wood. This should also be looked at very carefully in forestry planning. Although a range of products has already been developed ready for sale in the above applications, the processing technology required for this also needs to be developed.

3.4.1.2 The Committee believes that implementation of the chemicals directive will provide a basis for the further development of biomass-based chemistry, which is only in its infancy and therefore requires intensive research. When problematic substances are identified in the course of the REACH process, alternatives should be developed and this could be a promising research field for regrowing raw materials. Between 1991 and 2005 the percentage of regrowing raw materials used in the German chemical industry increased from 8 % to 10.4 % (this figure relates only to the chemical and pharmaceutical industries and excludes the paper-making industry and the natural fibre processing industry).

3.4.1.3 The Committee stresses the following goals in developing biomass-based product lines:

- more efficient use of materials and energy;
- replacing fossil raw materials and other finite raw materials;
- avoiding damage to the environment;
- harnessing biodegradability;
- reducing weight through light construction;
- tapping the advantages of bio-construction;
- achieving safety at work.

3.4.1.4 Development of the different product lines is currently hampered by the fact that in many cases it has not been possible to reduce costs. Reasons for this are lack of funding for production and market launch, and inadequate spending on research and development. In addition, these raw materials suffer a tax disadvantage in some countries. The Committee therefore suggests that the marketability and competitiveness of raw material applications be accelerated by setting utilisation requirements similar to feed-in rules for electricity.

3.4.2 Heating

The Committee considers heating production from renewable sources to be crucially important in relation to climate policy. Around 60 % of final energy consumption is accounted for by this sector. Only products and raw materials having low-energy properties are required in this context. The EESC is disturbed to see that 35 % of the wood grown annually in the EU's forests remains unused (excluding Natura 2000 areas), even taking account of the necessary proportion of waste wood. Significant additional aspects to be borne in mind in this context are the fact that less waste wood means less risk of forest fires and the fact that stepping up the utilisation of forests will give incentives to regional economies. The replacement of crude oil and natural gas in the heating market is technologically well-advanced and economically much easier than in other sectors, and is precisely for this reason an essential aspect of environmental and economic policy. Nevertheless, the use of biomass for heat production is growing only very slowly.

3.4.2.1 Unlike the electricity and fuels sectors, legislation is lacking on the use of renewables in heat production. In order to promote biomass-based heat production at European level, the Committee calls for further legislative measures to support renewable heat production and use. The EESC takes the view that measures similar to the feed-in rules for electricity could stimulate action.

3.4.2.2 At present around 56 million EU citizens are connected to district heating networks, 61 % of them in the new Member States. The EESC calls for Structural Fund resources to be targeted at extending and overhauling these systems to operate on regrowing raw materials. In the process, the use of cogeneration should be particularly promoted.

3.4.2.3 Since there is a long time horizon for investment in heating technology, co-generation, district heating and supply systems, the Committee sees a need for far more short-term measures, even in the 'old' EU Member States. There is an urgent need here not just for information but also for administrative readjustments.

3.4.2.4 The different forestry and property law regimes in the Member States impede individual households' access to waste wood from forests. Red tape should be minimised here, in particular given the new demand situation.

3.4.3 Fuels

3.4.3.1 About 30 % of EU energy consumption is accounted for by transport. Plant oil, biodiesel, ethanol and synthetic fuels made from biomass offer alternatives to oil. The EESC notes that progress in implementing the biofuels directive is very sluggish. The aim is 5.75 % of market share by 2010, and 2005's figure of 1.4 % falls substantially short of the 2 % benchmark. The Committee explicitly supports the target areas set out in the Intelligent Energy Europe (IEE) programme (Decision 1230/2003/EC):

- legislation, fiscal regimes and standards/norms for fuels;
- improving supply chains;
- market demand for alternatively propelled vehicles;
- accompanying measures.

3.4.3.2 At the present time, with a view to increasing ethanol production in Europe, calls have been made in the WTO negotiations for import quotas for ethanol to be set accordingly. This is the only way to ensure that this new economic sector, which seeks to provide a replacement for petroleum, also has the chance to develop in the EU.

3.4.3.3 Both the European Commission and the Member States are planning to replace tax breaks with fixed additive quotas as an instrument for promoting the introduction of renewable fuels. The EESC is concerned that many of the investments already made in this new economic sector would thus be jeopardised, and calls for more policy certainty. It also notes that regionally adapted investment is only possible if tax breaks are used as an instrument to promote biofuels.

3.4.3.4 Even assuming an optimistic prognosis, not more than a mere 35 % of current fuel consumption can be replaced by plant-based fuels at some time in the future. Second generation biomass-to-liquid (BTL) fuels still require a considerable amount of further technological development and development with regard to market readiness. In the context of these forecasts, it is also pointed out that a given area can be earmarked only once for a particular use. The Committee emphasises that a more efficient transport policy and substantially lower fuel consumption must remain priority objectives in order to safeguard our economic future.

3.4.4 Electricity

3.4.4.1 Over the next thirty years; power station capacity of 200 000 MW in electricity output will have to be replaced in Europe. This will require investment of at least EUR 200 billion, to lay the foundations for future energy production. The Committee also sees an opportunity here to develop more cogeneration systems by adjusting the size of power stations. In this way energy efficiency may be increased considerably.

3.4.4.2 Waste wood, manure, biowaste and other animal and plant waste materials have so far been used as biomass in the electricity market. The share of biomass in power generation is growing only slowly. Unless biomass is used more, the aims of the directive on the promotion of electricity produced from renewable energy sources (EC 2001/77) will not be achieved.

3.4.4.3 Since the electricity supply system represents a bottleneck, fixed feed-in conditions can be effectively established. The EESC considers the following factors to be important: reliable returns on innovative investment, feed-in prices differentiated according to production costs and available technology, five-year review to adjust feed-in prices to new investment with more efficient technologies, a bonus scheme for new technologies, geothermal energy, small and more local units. A bonus scheme based on raw materials used would also make sense. The Committee believes that grassland and follow-up crops and by-products such as straw should be rewarded through a bonus scheme, as should also the utilisation of by-products such as oilseed-cakes and spent grain.

3.4.5 Targets

EU targets exist for certain sectors where regrowing raw materials are used, such as biofuels and electricity production from renewable energy sources. These should be updated to reflect current price trends on fossil fuel energy markets. The Committee believes that the European Union should also set common targets and a common framework for action in relation to the utilisation of regrowing raw materials as materials and for heat generation.

3.4.5.1 The Committee favours a **target** of 4 x 25 for 2020. In terms of future biomass use, this means that 25 % of electricity supply, 25 % of heating supply, 25 % of fuels and 25 % of materials produced from crude oil products, such as plastics, would be covered by regrowing raw materials and renewable energies. The current level of consumption of fossil raw materials should serve as a basis in this context. Even in the event of a shift to renewable resources based on these targets, the efficient use of all resources is a crucial prerequisite for economic development. This means that substantially more efficient use

of materials and energy in the EU is essential if these objectives are to be widely met.

3.5 Identifying political obstacles to the development of product lines

There are complex political and administrative obstacles in the 25 Member States as a result of differences in policy implementation and different legal frameworks. Certain key areas are therefore mentioned below which should be checked for unjustified, development-impeding effects on the use of regrowing raw materials at both EU and Member State levels.

3.5.1 Plant fibres

Country quotas for long or short fibres discourage investment. As regards the structure of processing subsidies, the Committee agrees with the findings of the study carried out by Ernst & Young for the European Commission on the common market organisation for flax and hemp. This study recommends maintaining the subsidy for short fibres and turning it into a subsidy for all fibres. To ensure strong growth of the natural fibres sector the Committee calls for more predictability in this area of the market organisation.

3.5.2 Building materials

Authorisation provisions under building regulations must be adapted so as to favour the use of regrowing raw materials as a building material, in view of the benefits which they offer both as products and from a recycling point of view. In particular, the Committee calls on the European Commission to establish to what extent legal provisions prevent the use of these materials in the construction sector and to present proposals for improving the situation.

3.5.3 Emission and waste rules

In many places, emission rules — especially for small incineration plants — and waste legislation governing the production of electricity from biomass and biodegradable materials further inhibit the introduction of potential applications for regrowing raw materials. The Committee calls for an environment-friendly framework to be defined allowing the intensive, environmentally sustainable marketing of these products or increased use of biomass. The same considerations apply in the case of the observance of the air quality directive. The Committee also calls for changes to the end-of-life vehicles directive to meet the goal of improved recycling and further urges that, in this same sector, the issue of energy efficiency, in particular, be examined in relation to new materials, light-weight construction and recycling properties.

3.5.4 Tax legislation

As regards approximating fiscal regimes in Europe, the Committee calls for tax systems to be better geared to environmental and resource concerns. The aim must also be to dismantle tax privileges for fossil raw materials. On the other hand, consideration should be given to reducing VAT, for instance on natural fibres. Another example is bringing down VAT on the use of regrowing raw materials in district heating systems.

3.5.5 European standards

Even if there are legal rules governing processing standards, there is a need for an ongoing review of the process of adapting and improving standardisation systems to take account of new biomass materials and technologies and there is also a need to press ahead with this process. The aim should be to safeguard, in particular, the positive balance as regards the origin of products by taking action in respect of process standards. In this context the Committee highlights the need to introduce an accreditation scheme. By way of an example, in the context of the carbon balance, the clearing of a rainforest to make way for palm oil production would result in a negative carbon balance for a period of 30 years. Furthermore, European standardisation systems must be expanded to take account of the positive product and recycling properties of biomass.

3.6 Policies to increase the use of regrowing raw materials in the EU

The Committee expresses concern over the current lack of progress towards achieving a more effective EU energy policy and raw materials policy.

The Committee is critical of the fact that a very large number of Commission units deal with regrowing raw materials independently of one another. Because this policy area is so important, the Committee calls for a coordination unit or task force to be set up in the Commission. Ambitious objectives, as set out in point 3.4.5.1, are essential.

3.6.1 Biomass Action Plan

3.6.1.1 The EESC welcomes the Commission's Biomass Action Plan for the EU. National and regional action plans must be drawn up on the basis of this plan. It is necessary to check whether the objectives are achieved. The Committee welcomes the fact that the Action Plan addresses the issue of the potential of biomass as a source of heating; this potential remains largely unexploited. The Committee does, however, regret that the Biomass Action Plan is only concerned with using biomass to produce energy, and therefore calls for the plan to be extended to support use as a raw material and research into new applications, and to promote public relations and consultative activities. From the point of view of economic policy it is necessary to launch a business start-up initiative for regrowing raw materials in order to strengthen the position of

SMEs in particular given the difficulty of attracting risk capital. The Committee deplores the fact that, when dealing with international trade, the Action Plan fails to propose a change in market access conditions commensurate with the problems facing world trade.

3.6.1.2 The Commission's communication on the support of electricity from renewable energy sources (COM(2005) 627 final) states that the potential, particularly of biomass and biogas, continues to be untapped due to the inadequate legislative framework in most EU countries. Feed-in systems with cost-based prices have proven very effective in the market launch of renewable energies. The EESC expects the Commission to draw on this report to come up with far-reaching measures.

3.6.2 Research and development

3.6.2.1 The Committee is yet to be persuaded that a substantial part of the 7th Framework Programme for Research and Development really is devoted to biomass use. More comprehensive research programmes are needed for both energy and materials production from regrowing raw materials. The EESC points out the links that need to be made with other research areas — such as materials research, chemical research and nanotechnology. Adoption of the REACH regulation provides a further reason for promoting research activities in the biomass-based chemicals sector.

3.6.2.2 Without the fundamental change in the matrix of the new Research and Development Framework Programme called for by the EESC, the necessary sea change in the EU's approach to raw materials will be hampered. The volume of supply of regrowing raw materials produced from the land is not the limiting factor at present. The problem is rather lagging progress as regards the technological level of further processing and conversion technology right up to the production or marketing of the products in question. Research in this field needs to be stepped up.

3.6.3 Structural funds

The Committee expects a minimum of Structural Fund allocations in the next financing period to be earmarked for investment in regrowing raw materials.

3.7 Protection of the environment, nature and landscape: ensuring biodiversity

The Committee thinks that expanding the use of regrowing raw materials should not encroach on other environmental objectives. It therefore recommends that the following principles be observed:

- cultivation of regrowing raw materials should be subject to the same principles of good professional practice as food production;

- even after having been used for growing non-food raw materials, which must be done according to the procedures set out in points 3.2 to 3.2.3, the land concerned must remain suitable for food production;
- regrowing raw materials should be cultivated on land that is already being used for agriculture and on set-aside land, including, for example, areas which reform has left temporarily uncultivated, and their cultivation must not lead to a reduction in permanent pasture;
- production should ideally be in regional or local cycles so as to reduce transport, whose negative impact on the environment is well documented;
- ecologically valuable land should be reserved for nature conservation and managed in accordance with conservation goals;
- there should be a focus on promoting and cultivating regrowing raw materials that demonstrate a good ecobalance.

These principles should also underlie national and international accreditation standards.

Observation of these principles can ensure that the production of renewable raw materials constitutes a win-win situation for economic development and the environment by 'joining up objectives which belong together'.

Brussels, 15 March 2006.

3.8 *The international dimension of developing regrowing raw materials*

With conflicts looming about raw materials such as oil, the development of regrowing raw materials in the European Union also has a foreign and development policy and peace-promoting dimension.

3.8.1 Ensuring the supply of food to all sections of the population must be the priority in every country. The Committee therefore urges that the cultivation and export of biomass fuel should on no account jeopardise a country's **food supply**. **WTO rules** should also be qualified in this respect. The governments concerned must be able to establish the necessary policy framework to guarantee the country's food sufficiency. The Committee likewise sees the need to include labour-law standards and environmental standards in the WTO's non-tariff rules governing international trade in renewable raw materials. The Committee supports the setting-up of an International Agency for Renewable Energies (IRENA) and calls for greater transparency in the international raw materials sector.

3.8.2 The EESC notes that **the EU economy is dependent on the development and export of innovative technologies** ⁽¹⁾. Innovative processes and products from regrowing raw materials provide the basis for making the EU a world leader in relation to technologies of the future. The political framework for the development of regrowing raw materials is thus of key importance for economic growth within the European Union.

The President
of the European Economic and Social Committee
Anne-Marie SIGMUND

⁽¹⁾ EESC opinion, OJ C 241 of 28.9.2004, pp. 44-48.

APPENDIX

to the Opinion of the European Economic and Social Committee

The following amendments, which were supported by more than a quarter of the votes cast, were rejected:

Point 1.8

Delete point.

The Committee explicitly supports EU **target-setting** for the share of renewable raw materials sources. It recommends 4 x 25 for 2020, or 25 % of electricity, heating, fuels and new materials, such as compound materials, natural fibre reinforced plastics, or other petrochemical products.

Reason

The proposed targets of 4 x 25 by 2020 are too ambitious and do not take into account the interests of energy-intensive production sectors such as the paper or chemicals industries.

Voting

For: 43

Against: 66

Abstentions: 14

Point 3.4.5.1

Recast as follows.

The Committee favours a **target** of 4 x 25 for 2020. In terms of future biomass use, this means that 25 % of electricity supply, 25 % of heating supply, 25 % of fuels and 25 % of materials produced from crude oil products, such as plastics, would be covered by regrowing raw materials and renewable energies. The current level of consumption of fossil raw materials should serve as a basis in this context. Even in the event of a shift to renewable resources based on these targets, tThe efficient use of all resources is still a crucial prerequisite for economic development. This means that substantially more efficient use of materials and energy in the EU is essential if these objectives are to be widely met.

Reason

The proposed targets of 4 x 25 by 2020 are too ambitious and do not take into account the interests of energy-intensive production sectors such as the paper or chemicals industries.

Voting

For: 44

Against: 70

Abstentions: 12
