

**STAKEHOLDER CONFERENCE ON BIO-FUELS  
ORGANISED BY BIRD-LIFE INTERNATIONAL, THE EUROPEAN ENVIRONMENTAL BUREAU  
AND THE EUROPEAN FEDERATION FOR TRANSPORT AND ENVIRONMENT**

**BRUSSELS, 7 JUNE 2006**

**Ladies and Gentlemen,**

**Thank you for your invitation to address this important conference which comes at a crucial time.**

**The European Union is already working towards achieving a 12% share of energy for renewables in general and a 5.75% share for biofuels in transport by 2010.**

**These targets are expected to rise. In fact, the European Summit in March this year discussed increasing the overall share of renewables to 15% and the share of biofuels to 8% in 2015. Even higher shares have been suggested by the European Parliament for 2020. Of course, any proposal for raising the limits needs to be subject to an Impact Assessment and this must assess the environmental consequences of the proposed change.**

**Alongside energy efficiency, renewable energy is on the way to becoming a cornerstone of the energy and environmental policies of the European Union. There are a number of reasons for this.**

**Firstly, the International Energy Agency predicts that worldwide energy demand will increase 50% by 2030 if governments stick with current policies. Oil and gas prices are the highest for many years. Many say the days of cheap oil are over.**

**Europe's own oil, gas and coal reserves are diminishing. Today we import 50% of our total energy needs, and in two decades, if nothing is done, it is projected to be 70%. The precariousness of this situation is clearly illustrated by the recent gas price dispute between Russia and Ukraine – and the continued instability in the Middle East.**

**The need to reduce dependence on imported energy and to increase economic stability and sustainability is reinforcing the case for diversification, particularly into renewables.**

**We also stand to benefit from it economically. The renewable energy sector features amongst the fastest growing and most innovative sectors in the European Union. Annual turnover has reached 30 billion euro or about 50% of the world market, and more than 200.000 jobs have been created. With increasing volumes, we have also seen significant cost-reductions : renewables are becoming progressively more competitive.**

**It is a highly innovative, fast-developing sector, where further growth is expected and should be encouraged. In the field of bio-fuels, there is much potential to develop more advanced, higher yielding bio-fuel production processes with a better environmental profile. This development can contribute to the substantial evolution of the sector.**

**Secondly, there is more and more distressing evidence of the effects of climate change. 2005 was the hottest year ever recorded. In 2005, Europe witnessed devastating floods, droughts and forest fires. Hurricane Katrina demonstrated the staggering costs of climate-related disasters. Recent analysis of ice-cores has revealed that greenhouse gas concentrations in the atmosphere are higher now than at any time in the past 650.000 years.**

**We have to redouble efforts against climate change – both internationally and in the European Union. And, without a doubt, renewable energy must play a prominent role in this fight.**

**Thirdly, we must not forget that renewables offer a solution for providing millions of people in developing countries with access to energy, wider ownership and decreased dependence, thus facilitating their successful path to sustainable development.**

**Moreover, developing countries are spending increasing proportions of their GDP on energy imports – with devastating effects on economic growth and levels of indebtedness. Clean low-cost renewable energies can offer access to energy for millions**

of people in developing countries, and without any risk of damage to health or the environment.

Lastly, the development of our societies has been extensively based on resources that are not renewable and that will, at a certain point, be entirely consumed if we continue in this way. This is against the principle of sustainable development, a cornerstone for the European Union. It is therefore essential to guarantee the preservation of the environment and of the non-renewable resources. Renewable energies offer this also.

I strongly believe the only long-term sustainable solutions to the energy challenge are to achieve dramatic, indispensable improvements in energy efficiency and, at the same time, to expand renewable energy sources.

As biomass is a relatively cheap form of renewable energy for many end-uses, increased use of biomass is expected to play a considerable role in reaching the above-mentioned goals and in meeting more ambitious EU targets for renewables.

Another important point is that biomass energy can be stored just like oil and coal, which means that it is available when we need it.

However, biomass is also a limited resource : analyses carried out by the European Environment Agency indicate that, from the viewpoint of environmental compatibility, the maximum amount of biomass available for energy purposes could increase to around 300 million tonnes oil equivalent in 2030 – compared to consumption of about 70 million tonnes of oil equivalent today. The figures should not be deceiving : this growth corresponds to just over a sixth of the EU's *current* primary energy demand of around 1.700 millions tonnes oil equivalent.

So, EU biomass will be able to cover a share of our energy demand, but it is certainly not the magical and sole solution for our energy future. It is a precious resource, so we have to manage it and to use it carefully in order to get the most out of it – keeping in mind environmental gains and the need to avoid potential negative impacts.

**In fact, it should not be forgotten that intensive production of any form of biomass can have serious negative environmental impacts. The potential problems include :**

- **pollution of soil and water from use of fertilisers and pesticides;**
- **impacts on bio-diversity from use of fertilisers, pesticides, monoculture and forest clearing;**
- **loss of the carbon stored in grasslands and forests when the land is used for cultivation;**
- **loss of nutrients and fertility when forests are over-exploited.**

**In addition, the use of biomass for energy can also have environmental impacts – not least emissions of volatile organic compounds from bio-fuels and fine particulates from biomass combustion. Small stoves fired by biomass are responsible for about half the emissions of fine particulates in some Member States.**

**The need to have a precise picture of possible environmental impacts of a non-controlled use of biomass figures prominently in the work of the Commission.**

**To give you some examples in this respect, let me briefly mention the following :**

1. **first, a study made by the European Environment Agency makes a large number of considerations regarding environmental quality targets that need to be taken on board – for instance that no grasslands are cultivated, that there is a minimum of 30% environmentally oriented farming by 2030 and that there are no fellings in protected forests.**
2. **secondly, the "Well-to-wheels study" of the Joint Research Centre that provides important insights into the impacts in terms of fossil fuel replacement and CO<sub>2</sub> emissions of biomass-based alternatives.**
3. **thirdly, a study that DG ENV is undertaking on least-cost scenarios to achieve a 20% renewables share of EU energy supply by 2020. This will provide**

**information on the costs of reducing CO<sub>2</sub> emissions through different biomass use strategies.**

**Environmental concerns have to be – and they have now become – an integral part of EU biomass and bio-fuels policy as there is no benefit in replacing unsustainable fossil fuel use by unsustainable use of biomass and bio-fuels.**

**For example, the recent communication from DG AGRI stresses measures to ensure both optimal greenhouse gas benefits from bio-fuels and the sustainability of bio-fuel feedstock cultivation in the European Union and in third countries. The Biomass Action Plan published last year also addresses some of these environmental concerns.**

**The public consultation document of the Commission on the review of the Bio-fuel Directive also raises these issues.**

**What is now clear is that we need to move on to defining mechanisms through which these commitments can be turned into practical policy.**

**This is also true in relation to biomass use. For example, the Commission is presently carrying out a review of the Fuel Quality Directive : before proposing any change to the bio-fuel related limits, we need to understand the implications in terms of pollutant emissions, particularly of volatile organic compounds.**

**In fact, the Commission needs to consider carefully how policies can best increase use of biomass without damaging the environment, and this must also cover bio-fuels. Let me be clear that the Commission will not compromise on agreed environmental quality targets, whether for water, air quality, soil, agriculture, forests or biodiversity. Nor do we need to. The European Environment Agency study indicates that we can more than quadruple biomass use for energy purposes while still respecting these quality targets.**

**Member States have shown that good solutions exist to considerably reduce the problem of particulates from biomass stoves. I am similarly optimistic that we will be able to find answers to the fuel quality problems.**

**Still, we need to find balanced solutions to several issues, such as :**

- **how best to use our limited biomass resources – for heating and electricity production, or for transport bio-fuels;**
- **which type of bio-fuels we should encourage;**
- **how we should design the necessary support schemes so that operators and consumers receive the right incentives to limit emissions and other harmful environmental impacts;**
- **to what extent should imports of biomass and bio-fuels be allowed, and under what conditions, and how to ensure that growing EU demand for biomass and bio-fuels does not lead to unacceptable environmental consequences in trading partners;**
- **how to balance energy needs with competing uses of the total biomass potential – agriculture and forestry production.**

**The outcome of these discussions will have clear implications for the extent and the types of environmental pressures we need to mitigate, and the explicit rules we must propose. It is not possible to come up with final answers to this now, as the necessary analysis has not been finalised. But let me indicate the approach we intend to follow.**

**First, we need to take an integrated view on the use of biomass for energy. Using biomass for heating and electricity is cheaper and provides far greater avoidance of fossil energy and CO<sub>2</sub> than converting biomass to bio-fuels.**

**However, this must be balanced against the security of our oil supply, on which our transport sector relies almost 100%. The European Union stands to become almost 90% dependent on imported oil in 2030. The present target of 5.75% bio-fuels by 2010 ensures a basis for development efforts in this sector.**

**With current production techniques, EU bio-fuels cannot supply even this. Clearly there must be a full analysis of transport energy needs before we adopt more ambitious targets for bio-fuels.**

**Second, the so-called “second generation bio-fuels” seem to have much lower overall greenhouse gas emissions and other environmental impacts than the first generation bio-fuels that dominate production in the European Union today. They also offer higher potential for production and cost reductions, as they can be based on bio-waste with fewer competing end-uses.**

**I think few will disagree on this, but we nevertheless have to make sure that sufficient efforts are put into developing “second generation bio-fuels”. And we should in particular avoid locking large investments into first-generation bio-fuels before we know the true potential of second generation ones.**

**More investments in second generation bio-fuels may be particularly relevant for the road transport sector. As you will be aware, in the European Climate Change Programme, we are reviewing the options available to reach the Community objective of an average new car fleet emission of 120 g CO<sub>2</sub>/km. Bio-fuels have been identified as one of the measures that could contribute to this objective, of course complementing further improvements by carmakers on the vehicle side. We will focus on those measures where greenhouse gas savings can be measured and monitored, and where the stakeholders responsible for their implementation can clearly be identified. In the case of bio-fuels, this means that we will pay particular attention to their CO<sub>2</sub> balance, and to the measures that are already in place under other Community initiatives, in particular the bio-fuels directive.**

**Let me take this opportunity also to remind you that the car industry has committed to reaching the target of 140 g CO<sub>2</sub>/km by 2008/9, and that we keep monitoring very closely the progress they are making towards this target. Should it become clear that the commitments made are no longer honoured, the Commission will consider measures, including legislative ones, to ensure that the necessary reductions of CO<sub>2</sub> are delivered.**

**Third, we need to ensure that future support schemes fully reflect the differences in environmental benefits so that both producers and consumers receive the right incentives.**

**This will be crucial, as significant emissions of greenhouse gases from production of first generation bio-fuels like methane and nitrous oxide are not internalised in biomass production costs and prices under present EU legislation.**

**We need to identify how to ensure that this cost internalisation occurs, as these emissions are difficult and expensive to monitor. This is one issue that is being explored in the ongoing reviews of the bio-fuel and the fuel quality directive. We also need to ensure that minimum standards are put in place to avoid unacceptable environmental damage from biomass cultivation, as was flagged up in the Bio-fuels Strategy Communication earlier this year.**

**Fourth, as also stated in the Bio-fuels Strategy, we must remain open to increased bio-fuel imports. Tropical countries have clear comparative advantages at least in bio-ethanol production, but we need to ensure that this does not lead to unacceptable pressures on the environment and food production in exporting countries.**

**I may add that this is not only an issue for bio-fuels. Palm-oil and other agricultural products from developing countries with substantial environmental and social impacts are already imported in large amounts to the European Union, but bio-fuels will increase the pressure.**

**Finally, we must find ways to balance the use of biomass for biofuels against uses for agriculture and forestry production. The European forest-based industry is already complaining about price increases for wood due to subsidies for bio-energy, which they say are making their production in Europe non-competitive on international markets. There are indeed limits to how much biomass we can extract for energy purposes and we will need to think carefully about how to strike the right balance.**

**The policy of the European Commission in this field is still very much under development, and still much more analysis and discussion are needed. However, a lot is being done as we feel the urgency of the task.**

**I very much value the opportunity that this conference offers to get some important inputs for the discussion, and I urge you to continue the dialogue with the Commission in these areas.**

**Thank you.**