Sustainable biomass for European energy

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Ladies and gentlemen,

Welcome to the afternoon session of the Biomass conference of the Belgian presidency, I hope you have enjoyed an energizing lunch.

I am particularly thrilled that you have subscribed to the conference in such big numbers. It shows that the timing and approach of the conference was well chosen.

This morning the debates focused on the availability of biomass. This afternoon we will focus on the optimal use of biomass and the sustainability criteria.

The energy use of biomass plays a prominent role in almost all of the national renewable energy action plans. More than half of the increase of renewable energy needed to achieve the 2020 targets will consist of one of the various forms of bio-energy. International trade of solid bio-energy commodities has grown rapidly over the past few years. In 2008 over one third of the pellets that were consumed worldwide was traded across borders. And this trend will continue in the years to come.

Solid biomass can be used for electricity and heat production or, even better, for cogeneration. Biomass feedstocks are also the raw materials for biofuels production, and biomass can also be used for the production of biogas.

All these applications replace fossil fuels, often in small scale energy production plants. They can therefore let biomass play an essential role in the transition to a smart and decentralised sustainable energy grid. Bio-energy is perfect to balance the more fluctuating renewable energy sources like wind and solar. Especially in regions where hydro-power is not abundant. Biomass therefore has the potential to contribute substantially to the reduction of greenhouse gasses.

Biomass will therefore without any doubt play a major role in achieving the goals of the Energy Strategy 2020.

However, we have to make sure that all impacts of the production of biomass feedstocks are taken into account, especially when importing biomass from abroad. There are growing concerns about the indirect land use change impacts, which in some cases can alter a positive carbon balance into a negative one. Which is of course undesirable.

Further international action is also needed to stop deforestation and introduce sustainable forestry and agriculture policies everywhere. I hope the climate conference in Cancun will yield some positive results in this respect.

Next to the energy use of biomass, there is a growing demand for the non-energetic use of biomass in the industry, and not only in the more traditional wood based industries. The chemical industry is exploring the possibilities to replace fossil raw materials by biomass in bio-refineries.

Shifts like these can of course put an even bigger strain on the scarce biomass resources. Unless we manage to develop new production techniques for biomass, and are able to use biomass fractions that are today underdeveloped, like organic wastes.

Whichever way it goes, we will have to use the available biomass as clever and efficient as we can, in the production of energy and materials.

The most efficient energy conversion systems have to be implemented, especially combined heat & power and district heating and cooling systems. We will have to investigate further if producing transport fuels out of biomass in this context is the smart thing to do. It often seems more efficient to use biomass for electricity and heat production, and less for transport fuels.

Biomass can also be converted into bio-based (raw) materials and bioproducts which could replace fossil carbon – for example chemicals, fibers, pharmaceuticals and plastics.

I am therefore very happy that it was under our Belgian presidency that the European Industrial Bioenergy Initiative was launched as part of the Strategic Energy Technology Plan, on the 15th of November. This will help our European

industrial and research players to better collaborate and develop new industrial applications, products and innovation.

Biomaterials do not necessarily imply competition with biomass for energy, as once bio-based products spent their usefulness and become wastes, their energy content can be recovered to generate electricity, heat, or transport fuels. Thus, a challenge for better use of biomass is to establish waste collection, management and conversion systems which allow “cascading” use of biomass while taking into account economic constraints.

To make a reference to an International Energy Agency project: we have to make Better Use of Biomass for Energy, increasing greenhouse gas emission reductions, and minimising competition for food, feed and fiber.

Ladies and gentlemen,

I am looking forward to a fruitful continuation of the discussions, and invite you now to the afternoon sessions on the optimal use of biomass and the sustainability criteria.

Thank you.