

Remarks of Andrzej Dycha
Under Secretary of State, Ministry of Agriculture and Rural
Development
Republic of Poland

Made at the Washington International Energy Conference
Plenary Session on Agriculture, Forestry and Rural Development
March 5, 2008

Ladies and Gentlemen,

I have the honour to present the Polish position on the subject of the present meeting, namely on issues related to the use of renewable sources of energy, in particular of biomass of agricultural origin.

The fundamental environmental protection idea of the past was to preserve the environment unspoiled for future generations. Our generation, as well as the future ones, faces the challenge which may be defined as a necessity to stop the progressing degradation of the environment and to create conditions for gradual restoration, as far as possible, of the environment our ancestors lived in. As we are running out of the recognised and available fossil fuels, such as coal, oil and natural gas, using renewable sources of energy becomes more important. Not only does the advantage of such energy sources consist in their positive impact on the environment, but also in the diversity and availability on site, as well as in the fact that they are virtually inexhaustible. However widespread use of renewable energy sources generates costs related to the introduction of new technologies, their positive impact on the environment and energy security improvement make such actions and projects profitable by all accounts.

I would like to inform you that the Government of the Republic of Poland supports the opinion of the European Commission that the basic and priority task of agriculture in the European Union is food production. We are also of the opinion that the production potential of agriculture will be an important source allowing meeting the increased demand for bioenergy raw materials resulting from the necessary growth in the share of renewable energy in the general energy balance, including cultivation of energy crops. Nevertheless, considering the changing situation on the international food market, we think it is advisable to place particular emphasis on the use of by-products and waste from agriculture and agri-food industry, as well as from biodegradable waste material and urban wastewater.

The policy of rural and agricultural development should contribute to moderating the climate change and adapting to its effects. The policy should promote a number of corresponding actions, including actions concerning:

- water management – in order to improve water retention and flood protection measures,
- protection against erosion,

- afforestation – both in the context of improved retention and protection against erosion, as well as absorption of greenhouse gases,
- use of renewable energy sources – e.g. by establishing facilities and conditions for biogas and biofuel production,
- modernisation of transport, construction and power solutions in view of energy efficiency,
- biodiversity protection – as the indigenous species are at risk of being driven out, we think it is necessary to monitor alien species considered invasive in the ecosystem in the energy crops.

What is more, the Government of the Republic of Poland considers it necessary to balance the possibility of biomass production and energy needs of the European Union. In our opinion, import of biomass for energy purposes from third countries into the European Union requires carrying out a comprehensive analysis of economic, environmental and social effects of such activity for individual Member States and for the entire European Union. We hold that it is necessary to reduce the impact of biomass and its derivatives into the European Union, and also worldwide, consisting in excessive exploitation of arable land in third countries resulting in threats to food production and environmental protection (reduced biodiversity or deforestation), which may adversely affect the global climate change. In our opinion it is unacceptable to import biomass which is not produced in conformity with sustainability criteria, and thus harmful to the environment and biodiversity. We are aware that replacing the import of crude oil fuel and gas with the import of biomass and biofuel will not improve energy safety in the importing country, and the impact of the energy on the environment differs from the assumptions. It should also be stressed that long-distance biomass import is additionally cost-ineffective.

We place our hope on development of new technologies, including those connected with producing second generation fuel from biomass, in particular from by-products and waste from agriculture, agri-food processing industry, and from biodegradable urban wastewater.

According to our estimates, the national energy potential of by-products and waste from agriculture, agri-food processing industry, as well as from biodegradable waste material and urban wastewater still remains at the initial management stage. In addition, Poland has large reserves of currently set aside and fallow agricultural land amounting to around 1 million ha, which may be used for crops for energy purposes. It should also be borne in mind that increased demand triggers investments and intensified production. In Poland, increasing the yield of cereal grain crops by only 1q/ha enables reducing the area used for cereals cultivation by around 200 thousand hectares. Poland's large reserves are due to the yield potential of the cereals cultivated and to the current yield, which is significantly lower than possible in the agri-climatic conditions of Poland.

The possible demand for biocomponents on the market in transport fuels of 2020 amounts to 800 thousand cubic metres of bioethanol, the production of which requires around 2 million tonnes of cereals or around 9 million tonnes of root plants equivalent to the carbohydrates contained in the cereals. The corresponding demand for biodiesel (vegetable oil methyl esters) amounts to around 850 thousand cubic metres, which means demand for around 2.2 million

tonnes of rapeseed. The agricultural potential provides supplies of the expected amount of raw materials without damage to the food market, which places Poland in a very advantageous position. Also the already existing processing potential together with the investment plans ensures achieving the ambitious goals and objectives set within the European Union.

The Ministry of Agriculture and Rural Development, which I am honoured to be a representative of, holds that from agricultural point of view, it is of benefit to use biomass in agricultural biogas plants, as they use typical agricultural crops and additionally slurry and manure. Most of the fertiliser components and part of organic matter may return to the field in the form of sludge compost. Gasification of the straw surplus, which exceeds typical agricultural needs every year and is estimated at around 6-7 million tonnes, would mean a possibility to obtain around 2 billion cubic metres of biogas, which following purification would cover around 10% of the national demand for natural gas. Providing that around 1 million hectares of fallow and set-aside land is used for growing energy crops, with a minimum assumption that 1 hectare of energy crops gives at least 10 tonnes of dry substance enabling production of around 4 thousand cubic metres of biogas, there will be a possibility to obtain raw material for 4 billion cubic metres of biogas. There is also the energy potential of by-products such as slurry, as well as of by-products of the agri-food industry, including the meat industry. Using the energy potential offered by agriculture requires a lot of effort and considerable financial outlays, but according to the Ministry it is justified from the point of view of both energy and environmental safety and is crucial to the multifunctional rural and agricultural development. We are aware that the total outlays related to the use of biomass for energy purposes make up a significant amount, and it will take time to raise it, but separate investment outlays amounting to PLN several or dozen million will enable gradual completion of investments by local authorities and individual investors. The possibilities arising from achieving the objectives of dispersed power systems development will attract commercial investors to rural areas, which will additionally boost rural development.

Thank you for your attention,