

BIODEGVIELA LATVIJĀ – SITUĀCIJA UN PERSPEKTĪVAS BIOFUELS IN LATVIA – SITUATION AND PROSPECTS

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The Cabinet accepted the necessity of biofuels production and application motivated by scientists and supported by the Ministry of Agriculture already in 1995. Only at the end of 2003 the Government made a decision about the LR Program "Biofuels Production and Application in Latvia (2003-2010)". The Programme prescribes production of biofuel from agricultural raw materials: bioethanol from grains, biodiesel from rape seed oil, and biogas from wastes. The EC Guidelines request that 2 % of fuels used by traditional vehicles should be replaced with biofuels in year 2005 and increased to 5.75 % in 2010. The EC Institute for Prospective Technological Studies (IPTS) has estimated the energy outputs in Europe: biodiesel from rape seeds - 45–60 GJ/ha; bioethanol from sugar beets - 133-157 GJ/ha, from wheat - 25-62 GJ/ha, from wood – 55-77 GJ/ha. Quantities for Latvia would be different. Nevertheless that there is a need for bioethanol - as in 2005 for mixing with petrol will be needed 9000 t but in 2010 – 32000 t, at present bioethanol is not produced in Latvia. The above mentioned LR Programme prescribes to use as raw materials for bioethanol production 116 thousand tons of grain. Simultaneously with bioethanol production, up to 31000 t per year of a protein fodder concentrate can be obtained from stillage. Production of biodiesel from rape seed oil for the first time in Latvia was implemented in Naukseni, Valmiera region. The capacity of this enterprise is 2500 t per year. The Programme foresees to increase the biodiesel production for Latvia up to 43000 t per year till 2010. From 1 ton of rape seeds can be produced: 0.39 t of oil and 0.6 t of valuable oil-cake rich with protein as well as by-product glycerol. Today several manufacturers are concerned in biodiesel production in Latvia and the Ministry of Agriculture supports further increases of rape sowing. The National Standards for biodiesel and its mixtures with fossil diesel fuel have been elaborated. In Latvia law prescribes the excise tax allowances for biodiesel.

Production of biogas is implemented in the wastewater treatment plant "Daugavgrīva", Riga. The Getliņi-Eco manages the recycling of Riga municipal solid wastes. The biogas production reaches 1500-2000 m³/h. In Liepāja district a waste landfill Šķēde with a biogas production station is under construction and at the end of a year it is planned to produce 2300-3125 thousands Nm³ of biogas. The operation of this enterprise is planned till 2022 and 29000-38800 million Nm³ of gas will be produced. Another advanced landfill for municipal solid wastes is built and production of biogas is expected in Grobiņa (Liepāja region). The production of biogas is planned in other landfills as well. There is no initiative from farmers yet to produce biogas from agricultural wastes. It must be noticed that in obtaining of biogas the key question is the ecological impact but not energy carrier procuring.

The Cabinet Direction Nr.800 (19.12.2003) promotes further development of biofuel production in Latvia by implementation of the LR Program "Biofuels Production and Application in Latvia (2003-2010)". Realisation of this Program in 2010 will meet the EC requirement to use 5.75 % of biofuel as transport fuel but grain and rape utilised for biofuel production will take only 3.5 % of the arable land showing further opportunities for the biofuel production in Latvia.

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