

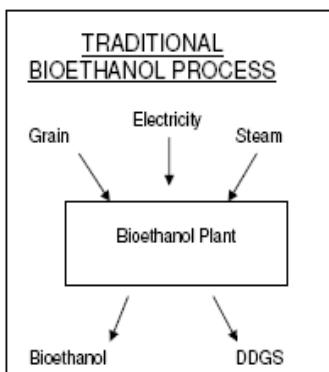
FRINGS AUSTRIA Confirms Upgrade to 1 ½ Generation

At the „Biofuels Round Table“ of 17th January and 5th July 2007, representatives from the Automotive and Mineral Oil Industry and the German Ministry of Environment and Agriculture voted on a roadmap for the promotion of biofuels containing the following measures necessary to increase the use of biofuels within Germany and the EU for the medium term:

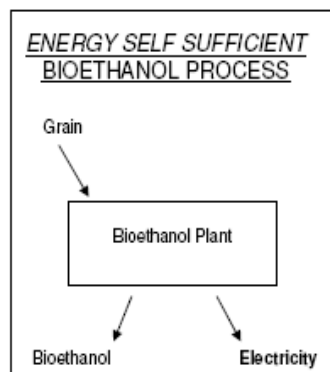
- Increasing the admixture of biofuels to diesel and petrol
- Raising biofuel targets
- Securing the sustainability of biofuels and the successive reduction of greenhouse gas emissions
- Promoting „second generation“** biofuels

According to the Biofuel Quota Law of 2006, biofuel producers shall only be granted tax concessions, if they fulfil their quota obligations, i.e. if the production of biomass complies with certain standards as for the sustainable cultivation of agricultural surfaces, the protection of biodiversity or the reduction of greenhouse gas emissions.

To ensure that these standards are observed, certification systems shall be established on a national, EC and international level. In order to additionally stimulate investment in next generation bioethanol plants and to create lasting perspectives for the time after the expiry of the tax shelter announced for 2015, biofuels shall be subject to compulsory assessment according to their greenhouse gas emissions, i.e. biofuels with a positive greenhouse gas balance and a higher factor within the quota system shall be privileged to other biofuels.



Production of 100 l bioethanol requires up to 62 l bioethanol equivalent to the necessary energy production



Production of 100 l bioethanol results in production of approx. 30 kW electricity (depending on type of grain)

In order to compensate the increasing drawback of „first generation“* bioethanol production, FRINGS AUSTRIA has developed a concept to create **energy self-sufficient „1 ½ generation“ bioethanol plants** out of „first generation“* plants consuming primary energy.

By upgrading the downstream part of the existing bioethanol plant, electricity, steam, process water and liquid fertiliser can be produced instead of by-products like animal feed/ DDGS.

In this process, the otherwise problematical stillage is separated by decantation into a solid/ liquid phase. The solid phase can be safely combusted in a biomass boiler and converted to energy. The liquid phase is utilised in a biogas plant to produce electricity. The remaining water is further purified in different membrane steps and can be reused as process water.

In line with this new plant concept, FRINGS AUSTRIA provides a wide range of offer reaching from the elaboration of case studies and business plans up to complete engineering solutions and turnkey plants. Furthermore, the piloting equipment for the complete process (incl. biomass combustion) with the original substrate is available. Thus, besides offering numerous economical benefits (especially in form of a refund of supplied current), the additional tax burden, which is to be implemented in foreseeable time, will be compensated and customers will no longer see themselves exposed to criticism over wasting primary energy sources.

* Biodiesel, bioethanol, vegetable oil made from commodities, such as wheat, maize, sugar cane, sugar beet, molasses, etc.

** Synthetical biofuels, bioethanol made from ligno-cellulosic biomass feedstock