

# Social, economic and environmental impact of 2<sup>nd</sup> generation ethanol production

Jesper DOHRUP

Inbicon Commercial, Nesa Allé 1, 2820 Gentofte, Denmark, (e-mail: jesdo@dongenergy.dk)

## **Abstract**

In order to reach the 2020 targets set by the European Commission in achieving a share of 10% renewable biofuels in the transport sector, growing interest is arising on 2nd generation ethanol production. This ethanol, is of particular interest as it satisfies the sustainability, ILUC and GHG emission requirements set by the Commission, so that it qualifies for the 3% advanced part of the 10% total. The fact that 2G ethanol is used as an admix in gasoline, that it is produced from agricultural by-products such as straw, corn stover, or other residues, and in an environmentally friendly process, qualifies the fuel as double counting and therefore a price premium is collected on this fuel. This fuel and its production is a very efficient and profitable way to reach the targets to reduce greenhouse gas emissions. This presentation includes how biomass sourcing will affect Agriculture, and the rural societies. Also included is the economic impact from an Owner and Investor perspective, and finally it will be shown how the production of 2G ethanol will contribute to reduce the CO<sub>2</sub> impact of road transport. All of this based on the work of Inbicon, and from information and knowledge gathered from projects and activities throughout Europe, in order to visualise such impacts when applied to a Croatian future ethanol production.

Key words: cellulosic, advanced, ethanol, greenhouse gas emission, ILUC, sustainable, economy, agriculture, biomass

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