

BIOREFINERY DEVELOPMENT – THE DANISH PERSPECTIVE

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For more than 25 years biomass has been part of the Danish energy system. The technology has now developed to a level where large-scale biorefineries will be build. A number of conversion technologies are involved in the refinery design including cellulosic ethanol, biogas, gasification and hydrogenation. A main issue is the integration and synergy between the different technologies and how they link to already established infrastructures in the energy-, chemical- and agricultural sector.

The presentation will provide an overview of the technology development including some of the breakthroughs made possible by the scaling from laboratory to pilot- and demonstration scale. Another issue is the biomass supply. The approach taken is to use and develop already available biomass from existing agriculture and forestry, rather than building a separate supply from bioenergy crops. This has a number of advantages in terms of sustainability and economy.

The last issue in the presentation will touch upon the European political perspectives of a biorefinery sector. Biorefineries are not just technology; they are also part of a supply security and a rural economy. Thus job creation, supply levels and the need for economic incentives plays a large role in the political decisions needed for securing long-term investments in the sector.