

TRACK 3

Organizer ATV

Time 23. November 2015 3:00 pm to 5:00 pm.

Venue Mogens Dahl Koncertsal, Snorresgade 22, 2300 Copenhagen S

Sustainable Technology

The global demand for food, feed, fiber and bioenergy continues to grow as a consequence of growing global population and wealth. At the same time degradation of soils and climatic conditions for agricultural production reduce the growth rate of yields of many agricultural crops around the world.

The agricultural production is also a major factor affecting many of the human impacts on our environment, i.e. water shortages, water quality, eutrophication, air pollution, biodiversity and the climate. Many of these harmful effects will be further exacerbated with expansion of the agricultural area globally.

This session will address new technologies, management and governance to support sustainable intensification in agriculture and new technologies for improved, sustainable and efficient use of biological resources. Finally a company representative will tell how the company in cooperation with selected partners pursues a zero-waste, beneficial to society approach by using the Cradle to Cradle (C2C) perspective when developing and marketing new products.

This session is held in English.

Programme

3:00 Introduction
Director of R&D Katrine Krogh Andersen, DMI
 Moderator of the session

3:10 Technologies, Management and Governance to Support Sustainable Intensification in Agriculture
Professor, Section Manager, Jørgen Olesen, Professor, Section Manager, Aarhus University
 There is a need to reduce the rise in demand for agricultural primary production. This may partly be done by increasing efficiencies in the use of such products in the value chains, and partly by enhancing the productivity in the primary production. This increase in productivity needs to come with reduced external impact on environment and

climate. This requires new cropping systems that also involve the use of new combinations of technologies, covering innovative cropping systems, new combinations of crops and varieties, new monitoring technologies to better target inputs spatially, technologies to better harvest biomass and recycle nutrients, and technologies at field and landscape scale to reduce impact of harmful emissions to the aquatic environment.

3:35 New technologies for improved, sustainable, and efficient use of biological resources
Professor, dr. scient. Lene Lange, DTU
New trends in the bioeconomy will be presented: 1. Optimized use of the biomass potentials, exploiting it to its full potentials, in a value cascade: From higher value products such as healthy food and feed ingredients, over new functional materials, and chemical building blocks, to biofuel. 2. A broader scope for the biorefinery technologies, including the yellow (straw) biorefinery; the green (fresh leaves) biorefinery; the blue biorefinery (for conversion of marine biomass); and the brown, waste biorefinery (for upgrading the organic part of the house hold waste). 3. Recognizing as drivers not just climate change concerns, necessity of developing substitutes for fossils, and need for improved resource efficiency; the most significant driver right now in Europe is that unfolding the potentials of the bioeconomy can give basis for significant job creation and for development also in rural areas.

4:10 Partnering to create sustainable innovations
Director, Group CSR, Simon Hoffmeyer Boas, Carlsberg Breweries A/S
In 2014, Carlsberg launched the Carlsberg Circular Community, a cooperation with selected partners together with whom the company pursues a zero-waste, beneficial to society approach by using the Cradle to Cradle (C2C) perspective when developing and marketing new products. One example is a co-operation with EcoXpac. Together Carlsberg and EcoXpac have initiated a 3 year project to develop a biodegradable and bio-based bottle from sustainably sourced wood fiber – the “Green Fiber Bottle”.

4:35 Discussion
Facilitated by Katrine Krogh Andersen

4:55 Summing up
Facilitated by Katrine Krogh Andersen

5:00 Short break
Please proceed to the large conference room for the last part of the Technology Day.
