



# Innovative bio-based products: Investment, Environmental Impacts and Future Perspectives

Results of a tender study

06 June 2018 | Crowne Plaza Brussels - Le Palace | Rue Gineste 3, 1210, Brussels, Belgium

## Programme

Time	Programme
09:00	REGISTRATION AND COFFEE
09:30	<b>Welcome, high-level statement</b> John Bell, Director of Bioeconomy, DG Research & Innovation, European Commission
09:40	<b>Opening Session</b> Moderator: Peter Woodward, Quest Associates
09:50	<b>The circular economy and the bioeconomy - Partners in sustainability</b> Mieke De Schoenmakere, Project manager, Green Economy, European Environment Agency
10:05	<b>Life Cycle Assessment (LCA) of seven innovative bio-based products</b> Li Shen, Assistant Professor, Energy & Resources, Utrecht University
10:20	<b>Some key methodological aspects related to the LCA case studies</b> Rana Pant, Team Leader, European Commission, Joint Research Centre, Directorate Sustainable Resources - Bio-Economy Unit (D1)
10:30	<b>Mini-panel with:</b> Li Shen, Assistant Professor, Energy & Resources, Utrecht University Rana Pant, Team Leader, European Commission, Joint Research Centre, Directorate Sustainable Resources - Bio-Economy Unit (D1) Rob van der Meij, Investment Manager, Capricorn Venture Partners Udo Felten, Manager Product Related Global Environmental Sustainability and Affairs, SIG Gerfried Jungmeier, Expert on Life Cycle (Sustainability) Assessment and Biorefineries, Joanneum Research Forschungsgesellschaft
10:50	COFFEE BREAK
11:20	<b>Success stories of bio-based products in Europe, with insights on key enablers, challenges and the investment potentials offered</b> Malene Sand Jespersen, Market Director, COWI
11:35	<b>The Winding Road to Success for Bio-based Products: Journey of the ins and outs for CelluComp and its owners</b> Christian Kemp-Griffin, Executive Director and CEO, CelluComp
11:45	<b>Mini-panel with:</b> Malene Sand Jespersen, Market Director, COWI Christian Kemp-Griffin, Executive Director and CEO of CelluComp Rob van der Meij, Investment Manager, Capricorn Venture Partners Udo Felten, Manager Product Related Global Environmental Sustainability and Affairs, SIG Gerfried Jungmeier, Expert on Life Cycle (Sustainability) Assessment and Biorefineries, Joanneum Research Forschungsgesellschaft

Time	Programme		
12:05	<b>Top emerging bio-based products, their properties and industrial applications</b> Paola Fabbri, Associate Professor, University of Bologna		
12:15	<b>The Avantium approach for bio-based chemicals, from ideation towards flagships</b> Ed de Jong, VP Development at Avantium		
12:30	<b>Mini-panel with:</b> Paola Fabbri, Associate Professor, University of Bologna Ed de Jong, VP Development at Avantium Rob van der Meij, Investment Manager, Capricorn Venture Partners Udo Felten, Manager Product Related Global Environmental Sustainability and Affairs, SIG Gerfried Jungmeier, Expert on Life Cycle (Sustainability) Assessment and Biorefineries, Joanneum Research Forschungsgesellschaft		
12:50	BUFFET LUNCH		
14:00	<b>Session I: Environmental impact of innovative bio-based products</b> Moderator: <b>Alex Williamson</b> , Bio-Based World News  In this session, the focus will be on the environmental performance of bio-based products through environmental Life Cycle Assessments (LCA). The novelty aspects of the LCA methodology applied in the project, e.g. land-use change impacts, end of life modelling and comparison with fossil reference products will be discussed.	<b>Session II: Successes in mobilising finance for the development and commercialisation of bio-based products</b> Moderator: <b>Luke Upton</b> , Bio-Based World News  In this session we will look at some of the different ways in which markets can be reached, private finance can be mobilized or profitability can be achieved and hear from companies and organisations with direct experience in these crucial dimensions of success.	<b>Session III: Prospecting the Bioeconomy: What products are most promising?</b> Moderator: <b>Paola Fabbri</b> , University of Bologna  This session will present and discuss the top 20 innovative bio-based products that have been identified as having the greatest potential for deployment in the next 5-10 years, with focus on the most relevant value chains from key biomass intermediates.
15:30	COFFEE BREAK		
16:00	<b>Closing Session</b> <i>Report from Parallel Sessions and Panel Discussion with:</i> Rob van der Meij, Investment Manager, Capricorn Venture Partners Udo Felten, Manager Product Related Global Environmental Sustainability and Affairs, SIG Gerfried Jungmeier, Expert on Life Cycle (Sustainability) Assessment and Biorefineries, Joanneum Research Forschungsgesellschaft Malene Sand Jespersen, Market Director, COWI		
16:50	<b>Closing remarks</b> Gaia Fantechi, Head of Unit, DG Research & Innovation, F2 Bio-based Products and Processing		

## Parallel Session I

### Environmental impact of innovative bio-based products

Moderator: Alex Williamson, Bio-Based World News (BBWN)

Time	Programme
14:00 - 14:15	<b>Introduction to the main modelling approach, impact categories and initial cradle-to-gate results illustrated for the case study of single-use drinking cups for cold drinks</b> Christian Moretti, Utrecht University
14:15 - 14:30	<b>Determination of the fossil reference product and comparison of impacts</b> Li Shen, Utrecht University
14:30 - 14:45	<b>Modelling of direct and indirect land-use impacts and other non-PEF impact categories</b> Lorie Hamelin, Hamelinlab Consulting / COWI
14:45 - 15:00	<b>End-of-Life scenarios for bio-based and fossil products - advanced modelling and effect on impact categories</b> Linda Høibye, COWI
15:00 - 15:25	Panel discussion with speakers
15:25 - 15:30	Wrap up and closing

## Parallel Session II

### Successes in mobilising finance for the development and commercialisation of bio-based products

Moderator: Luke Upton, Bio-Based World News (BBWN)

Time	Programme
14:00 - 14:15	<b>Presentation of study: key observations regarding risks and drivers on a) financing, b) commercialisation</b> Lucas Bossard, COWI
14:15 - 14:25	<b>Financing bio-based industries through partnerships</b> Suzy Renckens, Bio-Based Industries Consortium
14:25 - 14:40	<b>Deciding on investments - the process</b> Rob van der Meij, Investment Manager, Capricorn Venture Partners
14:40 - 15:15	Panel discussion with: <ul style="list-style-type: none"> <li>▪ Tuomas Mustonen, Paptic® bags</li> <li>▪ Pieter Imhof, BioBTX B.V.</li> <li>▪ Giulia Gregori, Novamont S.p.A.</li> <li>▪ Tuomas Hänninen, Lumir Oy</li> <li>▪ Jeremiah Dutton, Trifilon AB</li> <li>▪ Lucas Bossard, COWI</li> <li>▪ Suzy Renckens, Bio-Based Industries Consortium</li> </ul>
15:15 - 15:30	Q&A

## Parallel Session III

### Prospecting the Bioeconomy: What products are most promising?

Moderator: **Paola Fabbri**, University of Bologna

Time	Programme
14:00 - 14:20	<b>Is Lignin the new oil?</b> Panel discussion with: <ul style="list-style-type: none"><li>▪ <b>Paola Fabbri</b>, University of Bologna</li><li>▪ <b>Piret Kukk Fischer</b>, Fraunhofer Institute for Systems and Innovation Research ISI</li><li>▪ <b>Ludo Diels</b>, VITO</li></ul>
14:20 - 14:30	Q&A
14:30 - 14:50	<b>Urban wastes: mainly a need of reduction or a great value?</b> panel discussion with: <ul style="list-style-type: none"><li>▪ <b>Paola Fabbri</b>, University of Bologna</li><li>▪ <b>Martijn Vis</b>, BTG Biomass Technology Group</li><li>▪ <b>Martin Junginger</b>, Utrecht University</li></ul>
14:50 - 15:00	<b>Emerging innovative bio-based products from BBI JU projects</b> <b>Paloma Mallorquin</b> , Bio-Based Industries Joint Undertaking
15:00 - 15:20	<b>Let's look into the future of bio-based products: what's up?</b> Open discussion with: <ul style="list-style-type: none"><li>▪ <b>Davide Viaggi</b>, University of Bologna</li><li>▪ <b>Fabio Fava</b>, University of Bologna</li><li>▪ <b>Paloma Mallorquin</b>, Bio-Based Industries Joint Undertaking</li></ul>
15:20-15:30	Q&A