

CONFERENCE PROGRAM

Monday, 14 November 2016				
07:30 – 17:30	Registration Open			
09:00 – 10:35	SESSION ONE: Day One Plenary – Framework for Bioenergy <i>Chair: Colin Stucley</i> Chelsea Room			
09:00 – 09:05	Welcome Colin Stucley, Chair of Bioenergy Australia & Stephen Schuck, CEO of Bioenergy Australia			
09:05 – 09:20	Official Opening The Hon Mark Bailey MP, Minister for Main Roads, Road Safety and Ports and Minister for Energy, Biofuels and Water Supply			
09:20 – 09:45	Queensland's Biofutures Revolution Michael Burke, Department of State Development			
09:45 – 10:10	Financing Bioenergy in Australia: Experience and Insights from the Clean Energy Finance Corporation Henry Anning, Clean Energy Finance Corporation			
10:10 – 10:35	ARENA's Activities in Bioenergy Matthew Walden, ARENA			
10:35 – 11:00	Morning Tea and Poster Presentations in the Exhibition Area			
1100 - 1300	SESSION TWO: Day One Plenary – Bioenergy Perspectives <i>Chair: Colin Stucley</i> Chelsea Room			
1100 - 1120	Life Cycle GHG Assessments of Cellulosic Ethanol Concepts Jesper H Kløverpris, Novozymes, Denmark			
1120 - 1140	*The Potential of Drop-In Biofuels and Biomass-to-Biojet in Particular John N Saddler, University of British Columbia, Canada			
1140 - 1200	*Bioenergy in Austria Manfred Wörgetter, Bioenergy 2020+ GmbH, Austria			
1200 - 1220	*Overview of Advances in United States' Bioenergy Arena James J Spaeth, U.S. Department of Energy, Golden, United States of America			
1220 - 1240	*The Role of Bioenergy in a Low Carbon Economy Kees Kwant, Chairman IEA Bioenergy, Netherlands Enterprise Agency, Ministry of Economic Affairs, The Netherlands			
1240 - 1300	Prospects for Thermo-Chemical Conversion of Biogenic Resources in Australia Marc Stammbach, Hitachi Zosen Inova Australia			
1300 – 14:00	Lunch and Networking – Exhibition and Posters in the Exhibition Area			
14:00 - 15:40	SESSION THREE: Bioenergy Developments			
	Feedstocks <i>Chair: Mark Brown</i> Chelsea Room	*IEA Bioenergy Task 42 'Biorefining in a Future Bioeconomy' <i>Chair: Ed de Jong</i> Glanworth Room	Investing in Bioenergy <i>Chair: Paul McCartney</i> Hopewell Room	Sustainability, GHG and Life Cycle Analyses <i>Chair: Annette Cowie</i> Taldora Room
14:00 – 14:20	*IEA Bioenergy Task 43 – Workshop on Mobilisation of Forest Biomass Supply Chains For Bioenergy, Biofuels And Bioproducts , Mark Brown, University of the Sunshine Coast	*Second Generation Biorefineries – Optimisation Opportunities And Implications For Australia , Geoff Bell, Microbiogen	How to Maximise Funding Certainty , Gary Sofarelli, The Foresight Group	*Bioenergy: Is It Good For The Climate? , Annette Cowie, NSW DPI
14:20 – 14:40	Bridging The Gap Between Forest	*Zambezi Biorefinery: "Pure" Glucose From	Bioenergy From STP'S: Farm Or Factory,	A Method And Guidance For

* = IEA Bioenergy presentations.

	Biomass Producers And Users: A Case Study From The North Coast Of NSW , Fabiano Ximenes, NSW Department of Primary Industries	2nd Generation Feedstocks , Ed de Jong, Avantium Chemicals BV, The Netherlands	Kathryn Turner, Queensland Urban Utilities	Undertaking Life Cycle Assessments Of Bioenergy Products In Australia , Jonas Bengtsson, Edge Environment
14:40 – 15:00	Optimising Mallee Supply Chain For Biomass Production In Western Australia , Mohammad Reza Ghaffariyan, University of the Sunshine Coast	*Overview on Biorefining Activities in Austria , Michael Mandl, TBW Research, Austria	How is Biomass Energy Faring in Australia? , Sohumi Gandhi, Enriva Pty Ltd	Life Cycle Assessment of Biofuels in Australia , Tim F Grant, Lifecycles
15:00 – 15:20	Producing Improved Feedstocks To Facilitate The Development Of Bioenergy And Biomaterials Industries , Robert Henry, University of Queensland	*Bioenergy Demonstration Projects In Canada: Lessons Learned, Key Factors For Success, Knowledge And Technology Gaps , Eric Soucy, Natural Resources Canada	Commercial Fast Pyrolysis – Technology and Australian markets , Colin Stucley, Enecon Pty Ltd	Life Cycle Assessment Of Various Food Waste Treatment Alternatives Including Co-Digestion In Two Australian Local Government Areas , Joel Edwards, RMIT University
15:20 – 15:40	Forest And Wood Product Feedstocks For Biorefinery Innovation , Phil Hobson, Queensland University of Technology	*Corn Stover Value Chain: From Farm to Sugar , Murray McLaughlin, Bioindustrial Innovation Canada	Achieving Investment Ready Status for Bioenergy Projects , Jennifer Lauber-Patterson, Frontier Energy	Sustainable Bio-Plastic Production through Landfill Methane Recycling , Kirsten Heimann, James Cook University
15:40 – 16:00	Afternoon Tea and Poster Presentations in the Exhibition Area			
16:00 – 18:00	SESSION FOUR: Bioenergy Developments			
	Feedstocks and Upgrading <i>Chair: Mark Brown</i> Chelsea Room	Pyrolysis and HTL <i>Chair: Colin Stucley</i> Glanworth Room	Biogas <i>Chair: Bernadette McCabe</i> Hopewell Room	Algae <i>Chair: Connie Crookshanks</i> Taldora Room
16:00 – 16:20	Effect Of Alkaline And Hydrothermal Pretreatment On Chemical And Physical Composition, And Methane Yields Of Sugarcane Bagasse And Trash , Prasad Kaparaju, Griffith University.	Pyrolysis Oil Leaps Forward- An Excellent Option for Australia , Douglas Bradley, Climate Change Solutions, Canada	Transportation of Biomass With Hydraulic Driven Piston Pumps To Get Energy From Waste , Peter Peschken, Putzmeister Solid Pumps GmbH, Germany	* IEA Bioenergy Review on the State of Technology of Algal Biofuels , James D. (Jim) McMillan, National Renewable Energy Laboratory, USA
16:20 – 16:40	The Promise of CRISPR-Cas9 Genome Editing for Bioproducts and Biofuels , Susan Pond, The University of Sydney.	Hydrothermal Liquefaction - New Paradigm for Sustainable Bioenergy , Corinne Drennan, Pacific Northwest National Laboratory, USA	AURORA Waste to Energy Facility , David Leinster, Aquatec Maxcon	Algae and Biogas: Establishment Of Large Scale Demonstration Centre For Algal-Bacterial Digestate Treatment And Algae Biomass Production , Robert Reinhardt, Algen d.o.o., Slovenia
16:40 – 17:00	Mid-Size Pellet Production Facility - Key Factors For Driving A Positive ROI , Tony Esplin, Recycling Technologies Group Pty Ltd	Hydrothermal Processing of Different Components of Mallee Biomass in Hot-Compressed Water , Sui Boon Liaw, Curtin University	Revolutionising the Biogas Industry , Ari Ketola, Ductor Corporation	Lowering The Costs Of Microalgal Feedstock For Bioenergy , Peer M Schenk, University of Queensland

* = IEA Bioenergy presentations.

		<i>*This paper was subject to peer review.</i>		
17:00 – 17:20	Microwave Assisted Removal of Lignin and Xylan from Eucalyptus , Negin Amini, Monash University	Operational Performance Of A Novel Biomass Gasification Reactor For Converting Lump Biomaterials Into Renewable Syngas , Denis Doucet, Wildfire Energy	Update On Biogas Use At Australian Piggeries And Recent Research And Development , Alan G Skerman, Agri-Science Queensland, Department of Agriculture and Fisheries	Engineering a Heat-Tolerant and Ectoin-Producing Microalga in One Strike , Kirsten Heimann, James Cook University
17:20 - 17:40	Burning For The Unloved: Economic Evaluation Of Forest Biomass From Natural Disturbance For Bioenergy , Mathieu Béland, Laval University, Quebec, Canada	Grinding Pyrolysis - Development of a Novel Technology , MD Mahmudul Hasan, Curtin University	The Economics Of Biogas Plant Maintenance And Optimisation Works , Jason Hawley, Finn Biogas	Towards A Solar Powered Economy: Developing New Economic Opportunities , Ben Hankamer, The University of Queensland
				Biofuel <i>Chair: Connie Crookshanks</i> Taldora Room
17:40 – 18:00	The Influence Of Pretreatment Of Woody And Stramineous Biomass On The Behaviour Of Trace Elements During Thermochemical Conversion , Joanne Tanner, Department of Chemical Engineering, Monash University	Optimising Pyrolysis Conditions for Thermal Conversion of Beauty Leaf Tree (Calophyllum inophyllum L.) Press Cake , Nanjappa Ashwath, School of Medical and Applied Sciences, Central Queensland University	The Integration Of Anaerobic Digestion And Intermediate Pyrolysis To Maximise The Energy Recovery From The Organic Fraction Of Municipal Solid waste , Marie Kirby, Animal Production, Welfare and Veterinary Sciences, Harper Adams University, Newport, Shropshire, United Kingdom	Low Temperature Catalytic Conversion of Solid Organic Material into Liquid Fuel , Barrie King, Global Ecofuel Solutions SI
19:30 – 23:00	Pre Dinner Drinks and Conference Dinner Conference Dinner Speaker – Professor Ian Lowe AO <i>Burke, Wills & Leichhardt Room, Mercure Hotel Brisbane</i>			

PROVISIONAL PROGRAM

Tuesday, 15 November 2016				
07:30 – 17:30	Registration Open			
08:30 – 10:30	SESSION FIVE: Bioenergy Developments			
	Emerging Feedstocks <i>Chair: Ian O'Hara</i> Chelsea Room	Energy from Waste <i>Chair: Heather Bone</i> Glanworth Room	*IEA Bioenergy Task 37 – Energy from Biogas <i>Chair: Jerry Murphy</i> Hopewell Room	Regional Growth <i>Chair: Jackson Gerard</i> Taldora Room
08:30 – 08:50	Evaluation of Agave genotypes for bioethanol production, Deepa Rijal, Central Queensland University	Bioenergy – A Waste Management Perspective, Darrell Corbett, J J Richards & Sons Pty Ltd	*Biogas in the Circular Economy, Clare Lukehurst OBE, United Kingdom	Estimating Socioeconomic Key Performance Metrics For Transportation Biofuels, Philip Peck, Lund University, Sweden
08:50 – 09:10	Prospecting For Novel Energy-Rich Plant Biomasses, Rachel A Burton, ARC Centre of Excellence in Plant Cell Walls, University of Adelaide	The Potential For Energy From Waste In Australia, Joyanne Manning, ARUP	*The Role Of Biogas In Supporting Intermittent Renewable Electricity, Jerry Murphy, University College Cork, Ireland	Using smart Transitioning To A Low Carbon Future To Create Regional Economic Growth, Brian Cox, Bioenergy Association of New Zealand
09:10 – 09:30	Fungal Biotechnology For Bioenergy, Scott E Baker, Pacific Northwest National Laboratory, USA	* Small Scale Waste To Energy – Drivers And Barriers, Inge Johansson, Energy and Bioeconomy, SP Technical Research Institute of Sweden, Borås, Sweden	*IEA Bioenergy - Task 37 Energy from Biogas: Knowledge Sharing Opportunities For Australia During The 2016-2018 triennium, Bernadette McCabe, Nation Centre for Engineering in Agriculture, USQ	Bioenergy in Tasmania Developments and Opportunities, David M Hurburgh, Department of State Growth – Tasmania
09:30 – 09:50	Microbial Oil Production From Sugarcane Industry By-Products By Filamentous Fungi, Zhanying Zhang, Queensland University of Technology	Biomass CHP Plants: Global Best Practices In An Australian Perspective, Kevin Vandewalle, Vyncke, Petaling Jaya, Malaysia	*Biomethane Market Potential - Opportunities And Challenges Ahead, Mattias Svensson, Energiforsk - Swedish Energy Research Centre, Malmö, Sweden	Achieving Critical Mass-CLEAN Cowra Inc Perspective Advancing and Developing the Model For Utilising Biomass As A Driver For Sustainable Community Outcomes, Dylan Gower, CLEAN Cowra Inc
09:50 – 10:10	The Current Status of Development for a Sustainable Biofuel from the Legume Tree Pongamia Pinnata, Peter Gresshoff, University of Queensland	Addressing The Barriers To Greater Penetration Of Gasification-Based Bioenergy, San Shwe Hla, CSIRO Energy	*Monitoring And Process Control Of Biogas Plants, Günther Bochmann, IFA Tulln - BOKU University, Tulln, Austria	Biobased Economy in The Netherlands, Kees Kwant, Chairman IEA Bioenergy, Netherlands Enterprise Agency, Ministry of Economic Affairs, The Netherlands

10:10- 10:30	Engineering and Recovery Of High Levels Of Oils From Leaves: Game-Changing Pathway To Low-Cost Sustainable Biofuel Feedstocks , Allan Green, CSIRO	Assessing The Impact Of Biomass And Waste Feedstock Quality On Gasification Plant Cost And Performance , Andrew C Beath, CSIRO Energy	*Resource Recovery Via Distributed Biogas Production , Saija Rasi, Natural Resources Institute Finland	Wastewater Utilities In The Circular Economy , Matthew Mulliss, Queensland Urban Utilities
10:30 -10:55	Morning Tea and Poster Presentations in the Exhibition Area			
10:55 – 12:35	SESSION SIX: Bioenergy Developments and Supply			
	Feedstocks/Biomass Trade and Supply Chains <i>Chair: Mark Brown</i> Chelsea Room	Heat and Power <i>Chair: Steve Schuck</i> Glanworth Room	Biogas <i>Chair: Bernadette McCabe</i> Hopewell Room	*IEA Bioenergy Task 39 – Liquid Biofuels <i>Chair: Jack Saddler</i> Taldora Room
10:55 – 11:15	* Long Term Strategies On Sustainable Biomass Imports In European Bioenergy Markets , Luc Pelkmans, VITO NV, Belgium.		Wastewater + Food Waste = Bioenergy Factory , Philip Woods, Sydney Water	*Advanced Liquid Biofuels Developments in the USA , James D. (Jim) McMillan, National Renewable Energy Laboratory, USA
11:15 – 11:35	Production of Fuel Pellets. What-How-Why? , Peter Lange, CPM Europe B.V., The Netherlands	Biomass For Heat And Power Generation - Efficiencies And Emissions Of Advanced Wood Waste Fueled Energy Plants Depending On The Feedstock And Plant Design , Christian Jirkowsky, Polytechnik Biomass Energy Pty Ltd, New Zealand	Cost Effective Energy Recovery Using Co-Digestion – An Update , Chris K Hertle, GHD Pty Ltd	*Overview On Advanced Biofuels Technologies , Dina Bacovsky, Bioenergy 2020+, Austria
11:35 – 11:55	Selecting Feedstocks And Selecting Products For Chemicals From Biomass , Geoff Covey, Covey Consulting	The Latest Innovations In The Use Of Organic Rankine Cycle (ORC) Technology , Carlo Minini, Turboden S.R.L, Brescia, Italy	Biogas Production From Sugarcane Wastes To Reduce Fossil Fuel Use In The Sugar Industry , Ian M. O'Hara, Queensland University of Technology	*Management Of Inhibitors Of Biocatalysts In Biochemical Conversion Of Lignocellulosic Feedstocks , Leif J. Jönsson, Umea University, Sweden
	Biochar <i>Chair: Mark Brown</i> Chelsea Room			
11:55 – 12:15	Recent Implementations Of Pyrocal's Technologies For Conversion Of Biomass Residues To Heat And Char , James Joyce, Pyrocal Pty Ltd	PNG Biomass - Markham Valley Power - an Environmental and Social Large Scale Power Project , David Burbidge, PNG Biomass / Aligned Energy (Australia) Pty Ltd	Small-Scale High Pressure Water Scrubbing Technology To Upgrade Biogas Produced From Sugar Cane Bagasse To Transport Grade Biomethane , Prasad Kaparaju, Griffith School of Engineering, Griffith University	*Integration of Licella's Cat-HTR into Canfor Prince George Pulp Mill , Steve Rogers, Licella Pty Ltd
12:15-12:35	Woody Biomass To Charcoal – Prospects For Australian Forest And Metal Industries , Mark Cooksey, CSIRO	Yorke Biomass Energy Project , Terry Kallis, Yorke Biomass Energy	Case Study on Improving Biogas Quantity and Quality on an Anaerobic Cogeneration Plant with ACTI-Mag™ , Michael Romer,	*Comparison of Biofuels Life Cycle Assessment Tools for Sugarcane Ethanol Assessment in Brazil , Antonio Bonomi, Brazilian Bioethanol

* = IEA Bioenergy presentations.

			Calix Limited	Science and Technology Laboratory, Campinas, Brazil
12:35 – 13:40	Lunch and Networking – Exhibition and Posters in the Exhibition Area			
13:40 – 15:20	SESSION SEVEN: Bioenergy Developments			
	ABBA – Resource Assessment <i>Chair: Julie Bird</i> Chelsea Room	Community and Policy <i>Chair: Paul McCartney</i> Glanworth Room	Biogas <i>Chair: Prasad Kaparaju</i> Hopewell Room	Liquid Biofuels <i>Chair: Heather Bone</i> Taldora Room
13:40 – 14:00	Australian Biomass for Bioenergy Assessment , Julie Bird, Rural Industries R&D Corporation Dave Rogers, Department of Agriculture and Food Western Australia	Why Did Ecotech Advocate For A Mandate? , Doug Stuart, Ecotech Biodiesel	Continuous Anaerobic Digestion Of Pre-Treated Synthetic Medium With Focus On Lipid Degradation , Peter W Harris, National Centre for Engineering in Agriculture, USQ	REACH Technology for Converting Biomass into Jet Fuel and Diesel , Karl Seck, Mercurius Biorefining, USA
14:00 – 14:20	Mary Lewitzka, RenewablesSA Kelly Wickham, Sustainability Victoria	Developing a Social Licence for Bioenergy - The Northern Rivers Experience , Natalie Meyer, Sustain Energy	process monitoring and control in the AD Of Abattoir Wastewater – Upscaling From Lab To Large Scale , Thomas Schmidt, University of Southern Queensland	The Ethtec Cellulosic Ethanol Pilot Plant and Commercialisation Project , Russell Reeves, Ethanol Technologies Limited
14:20 – 14:40	Martin Moroni, Private Forests Tasmania Kelly Bryant, Department of Science, Information Technology and Innovation Fabiano Ximenes, NSW Department of Industry	Bioenergy Policies and Status of Bioenergy Implementation , Dina Bacovsky, Bioenergy 2020+, Austria	The Effect Of Temperature And Waste Composition On Organic Loading Thresholds In Anaerobic Co-Digestion , Mike Meng, Advanced Water Management Centre, The University of Queensland	Carbon Neutral Growth And The Role Of Alternative Jet Fuel , Robert Boyd, International Air Transport Association, Geneva, Switzerland
14:40-15:00	Ana Belgun, Data61 CSIRO Rebecca Dengate, Data61 CSIRO Phil Hobson, Queensland University of Technology	How Resilient Is The Social Licence Of Energy Cropping? Alex Baumber, The University of New South Wales	On The Acclimation Of Anaerobic Digestion To Important Chemical Inhibitors And The Impact Of Operator Intervention , Stephan Tait, Advanced Water Management Centre, The University of Queensland	Glycell – Leaf Resources’ Pretreatment Process For The Conversion Of Lignocellulosic Biomass To Fuels And Chemicals , Les Edye, Leaf Resources
15:00-15:20	Mohammad Reza Ghaffariyan, University of the Sunshine Coast	Biofuels Policy – The New Frontier , Mark Sutton, Biofuels Association of Australia	Process Improvement Of Energy And Value Extraction From Red Meat Processing Waste , Bernadette McCabe, University of Southern Queensland	Advanced Biofuels Investment Readiness Programme , Amy Philbrook, Australian Renewable Energy Agency (ARENA)
15:20 – 15:40	Afternoon Tea and Poster Presentations in the Exhibition Area			
15:40 - 16:50	SESSION EIGHT: Day Two Closing Plenary <i>Chair: Colin Stucley</i> Chelsea Room			
15:40 – 16:40	Panel Discussion: Rewind From 2040. How Did We Achieve The Biofuture? Jackson Gerard, Brian Cox, Col Stucley, Jack Saddler Moderator: Heather Bone			

	<p>The panellists are asked to project themselves to 2040. At this time 'peak oil' projections have been confirmed; depleting petroleum oil prices have skyrocketed from their anomalous lows of 2014-2016, greenhouse gas emissions from the fossil fuel have become severely restricted. The fledgling biobased industries of the early 21st century have matured, with several Fortune 500 companies having re-invented themselves in the biobased and bioenergy industries. How was this transition achieved? Each panellist will give their view on how this transition was achieved. What measures were put in place? What were the pathways followed to reduce dependency on fossil fuels and create new industries and make the transition to a biobased materials and energy economy?</p> <p>Each panellist will give a brief opening statement on measures that were necessary to make this transition. This will be followed by a panel discussion and open forum to make this transition a reality.</p>
16:40- 16:50	Close of Conference, Awards Ceremony