



OXFORD 2016
RESEARCH CONFERENCE



21-22 September 2016, St John's College, Oxford, OX1 3JP



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Innovation and Disruption: the energy sector in transition

PROGRAMME

DAY 1 Wednesday September 21st 2016				
09.00	Accommodation Registration: Main Porters Lodge, St John's College, St Giles, Oxford, OX1 3JP			
09.45	Conference Registration and Coffee: Garden Quad Registration Desk			
10.30	Welcome Auditorium			
10.35	Opening Address: Charles Hendry, Former Energy Minister, BIEE President			
11.05	First Plenary Session: <i>Sources of innovation and disruption</i> <i>Chair: Poyry</i>			
11.05	Angela Strank, Chief Scientist and Head of Technology, Downstream Segment, BP plc			
11.25	James Leaton, Research Director, Carbon Tracker Initiative			
11.45	Richard Hepworth, Director of Digital Transformation, UK Power and Utilities, PwC			
12.05	Questions and Discussion			
12.45	Energy Barometer 2016 – views from UK energy professionals			
13.00	Lunch			
14.30	First Parallel Session			
	Policy for National Energy Systems	14.30 A meta-analysis of the capability and performance of the energy innovation system in 40 countries. <i>Dr Fionn Rogan, Energy Policy and Modelling Group, University College, Cork</i>	15.00 A Fit-For-Purpose energy policy for the European Union. <i>Ms Maria Carvalho, Grantham Research Institute</i>	15.30 Innovation and the governance of energy industry codes. <i>Dr Matthew Lockwood, University of Exeter</i>

14.30	Regulation & Policy for the Power Sector	14.30 The role of regulation in supporting transformative change in the energy market. <i>Mr Martin Crouch, Ofgem</i>	15.00 Innovation incentive for regulated network industries. <i>Dr Rahmat Poudineh, Oxford Institute for Energy Studies</i>	15.30 Has the Low Carbon Network Fund been successful at stimulating innovation in the electricity networks? <i>Dr Aidan Rhodes, Imperial College London</i>
	Innovation & Disruption in Fossil Fuel Markets	14.30 Drivers and Hurdles for Gas Market Integration in Europe: Evidence from the Belgium-Luxembourg Pilot Market Merger Project. <i>Mr Chris Cuijpers, Commission for Electricity and Gas Regulation (CREG)</i>	15.00 Studying Boom-Bust Cycles in Natural Gas Production Assets Investments. <i>Mr Joël Enderlin, ENGIE Strategy Division</i>	15.30 How Can the North Sea Oil and Gas Industry be Revived? <i>Prof. Alex Kemp, University of Aberdeen</i>
	Innovation systems and the low carbon transition	14.30 Path dependence & path creation: roles for incumbents in the low carbon transition? <i>Prof Peter Pearson, Imperial College, London</i>	15.00 The role of State Investment Banks in enabling low-carbon technological change. <i>Ms Anna Geddes, ETH Zurich</i>	15.30 The drivers for China's wind energy technology innovation system. <i>Mr Rui Hu, Imperial College, London</i>
	Power Systems and Balancing	14.30 Innovative Business Models to Meet Grid Challenges. <i>Dr Luke Peck, Limejump Ltd</i>	15.00 Integrating supply and demand: smart systems; storage. <i>Mr Eamon Boland, Baringa Partners</i>	15.30 The impact of tightening margins on plant availability. <i>Dr Amy O'Mahoney, Ofgem</i>
16.00	Tea			

Second Parallel Session				
16.30 -18.00	Re-thinking Energy Demand	16.30 Energy trilemma for the 21st century. <i>Mr Ian Marchant, Dunelm Energy</i>	17.00 The energy ladder: A model for projecting energy demand. <i>Dr Tashi Erdmann, Shell Global Solutions International</i>	17.30 Rebound effect for energy services: the case of UK households. <i>Dr Mona Chitnis, University of Surrey</i>
	Does it matter who owns the energy system?	Dialogue session led by <i>Mr Alaa Owaineh, University of Surrey</i> , <i>Prof. Tim Foxon University of Sussex</i> , <i>Dr. Stephen Hall University of Leeds</i> , <i>Dr. Francis Li (UCL)</i> A transition to a low carbon energy system will require high levels of innovation both in technologies and in the governance of energy systems, which is likely to disrupt existing business models and incentives structures. Drawing on research from an EPSRC-funded project 'Realising Transition Pathways: Whole systems analysis for a UK more electric low carbon energy future', this session will examine the current and future impact of different forms of ownership on low carbon pathways for the UK electricity and wider energy system.		
	How Many Energy Models should be Developed, Maintained and Applied to Decision Making?	Dialogue session led by <i>Prof Neil Strachan, UCL</i> , with <i>Goran Strbac, Imperial College London</i> , <i>Marianne Zeyringer, University College London</i> , <i>Zenaida Sobal Mourao, University of Cambridge</i> Countries around the world are beginning the process of profoundly restructuring their energy systems to meet an interlinked set of policy goals; notably low carbon, secure and affordable energy supply. Decision makers across industry, government, and wider society needs to make key decisions in the light of this evolving landscape.		

16.30 -18.00	Student Presentations and Networking	<p>Short presentations of student's research topics, followed by themed discussions with other students and established academics.</p> <p>How can power utilities restructure their resource base in order to survive anticipated discontinuous change due to technological innovations in the industry? <i>Mr Morten Ansteensen. Norwegian University of Science and Technology, Norway</i></p> <p>Heating systems in buildings for the security of stability of the European electric power system. <i>Mr Pirmin Boch. University of Hohenheim, Germany</i></p> <p>Local government and energy infrastructure: Discourses of the state in city approaches to heat networks. <i>Ms Jessica Britton, University of Exeter, United Kingdom</i></p> <p>Call for Energy Governance in EU-Russia Gas Relations: Legal Solution to a Geopolitical Problem? <i>Natasha A. Georgiou, University of Reading</i></p> <p>Biofuels for Food - A spatial PEM approach to determine when the production of biofuel increases that of food crops. <i>Mr Niklas Hinkel, University of Cologne, Germany</i></p> <p>Energy Infrastructure Financing and Project Finance (Nigerian Energy Sector as a Case Study. <i>Mr Nasir Kolade, University of The West of Scotland</i></p> <p>An Empirical Analysis of Energy Demand in Sub-Saharan Africa (1980-2014). <i>Ms Aisha Kolawole, Oxford Brookes University</i></p> <p>The Impact of Demand Side Management on the Wholesale Prices of the British Electricity Market, <i>Ms Sara Lupo. University of Edinburgh</i></p> <p>Geo-economical Conflict between Russia and the EU over the Gas Market Regime. <i>Mr Nikita Odintsov, Charles University in Prague - Faculty of Social Sciences, Czech Republic</i></p> <p>Facing the Climate and Digital Challenge: European Energy Industry From Boom to Crisis and Transformation. <i>Mrs Proadpran Boonprasurd Piccini, BI Norwegian Business School, Norway</i></p> <p>Assessment of the innovation potential and possible future costs of energy storage technologies. <i>Mr Oliver Schmidt. Imperial College London, United Kingdom</i></p> <p>Risk premia in electricity spot markets - New empirical evidence for Germany and Austria. <i>Mr Niyaz Valitov, University of Wuppertal, Germany</i></p>
18.30	Drinks Reception	
19.30	Conference Dinner, St John's Dining Hall After Dinner Speaker: Sir Edward Davey, Former Secretary of State for Energy and Climate Change	

DAY 2 Thursday September 22 2016			
08.30	Registration (Single Day Delegates) Garden Quad Registration Desk		
09.00	Opening Address: Barbara Buchner, Executive Director, Climate Policy Initiative <i>Chair:</i>		
09.30	Second Plenary Session: New opportunities, New business.		
09.30	Michael Pollitt, Prof of Business Economics, Judge Business School, Cambridge		
09.50	Volker Beckers, Chairman, Albion Community Power		
10.10	Sara Bell, Founder and CEO, Tempus Energy		
10.30	Questions and Discussion		
11.00	Coffee		
11.30	Third Parallel Session		
	Government policy to stimulate sustainable energy innovation	Dialogue session led by <i>Dr Matthew Hannon, University of Strathclyde with Ms Paula Kivimaa, SPRU, University of Sussex, Mr Ajay Gambhir, Grantham Institute, Imperial College London, Dr Elizabeth Milsom, DECC, Dr Paul Westacott, Origami Energy, Dr Charlie Wilson, Tyndall Centre for Climate Change Research, University of East Anglia</i>	
		In the face of mounting environmental, energy security and economic pressures there is a growing demand for alternative energy technologies and business models that can satisfy our energy needs in a cleaner, cheaper and more secure fashion. Whilst energy innovation is by no means a new process we still remain unclear about the best way to stimulate sustainable energy innovation. With increasingly little time to meet our 2050 carbon reduction target, dwindling domestic fossil fuel reserves and concerns that oil prices will soon rebound it is essential that the correct policy mechanisms are put in place today to ensure that the energy technologies and business models of tomorrow are commercially viable and enjoy wide-scale deployment.	
11.30	Developments in Energy Storage	11.30 Optimal Storage Investment and Management under Uncertainty – It is costly to avoid outages! <i>Mr Joachim Geske, Imperial College Business School</i>	12.00 Accelerating energy storage innovation – what is needed and how can it be achieved? <i>Prof Peter Taylor, University of Leeds</i>
			12.30 How disruptive could storage be? <i>Dr. Phil Grunewald, University of Oxford.</i>
11.30	Socio-Environmental	11.30	12.00
			12.30

11.30	Influences on Low Carbon Innovation	The next big thing or too big for us? New business models for renewable energy cooperatives – barriers in the perception of cooperatives' members. <i>Prof Carsten Herbes, Nuertingen-Geislingen University</i>	Renewable energy deployment and costs in the UK: spatial analysis taking into account policy, social and environmental land use constraints. <i>Ms Marianne Zeyringer, UCL Energy Institute</i>	Political Power and the Development of UK Domestic Heat Policy. <i>Mr Richard Lowes, University of Exeter</i>
	Opportunities for Demand Response	11.30	12.00	12.30
		Smart technologies in the domestic and SME sectors: evidence and policy options. <i>Dr Peter Warren, Department for Business, Energy & Industrial Strategy</i>	Integrating wind power into the UK energy mix through dynamic demand-side response. <i>Mr Matthew Gross, University of Sussex</i>	Peak demand, price elasticity and intrinsic flexibility from time use activities. <i>Mr Jacopo Torriti, University of Reading</i>
Innovation in Policy	11.30	12.00	12.30	
	Governing for Innovation Without Disruption in Energy Systems. <i>Prof Catherine Mitchell, University of Exeter Energy Policy Group</i>	An empirical exploration into the role of phase-out policies for low-carbon energy transitions: the case of the German Energiewende. <i>Dr Karoline Rogge, University of Sussex.</i>	Future perspectives on policy instruments and market coupling for integration of RES-e in regional supergrids. <i>Dr Catalina Spataru, UCL, London</i>	
13.00	Lunch			
14.00	Third Plenary Session: <i>Facilitating the Transition</i> <i>Chair:</i>			
14.00	Michael Grubb, Prof International Energy and Climate Policy, UCL, and Ofgem			
14.20	Mariana Mazzucato, Prof Economics of Innovation, SPRU, Sussex University			
14.40	Jeremy Pocklington, Director General, Markets & Infrastructure, Department for Business, Energy and Industrial Strategy.			
15.00	Questions and Discussion			
15.30	BIEE AGM			
15.45	Tea			
16.00	Finish			