

## **ACCESS AND WASTE: THE TWO SIDES OF THE LOW CARBON COIN**

**For some years now the LCEDN and Strathclyde University have been developing a dynamic partnership around our mutual interest in low carbon transitions in the Global South.**

**For the first time during that partnership we have been able to secure funding to support running a joint Strathclyde/LCEDN event (which will also constitute the 8<sup>th</sup> LCEDN Conference) to run concurrently with a week-long Strathclyde event – 29<sup>th</sup> April – 3rd May 2019; the event will also showcase elements of the new DfID-funded MECS programme.**

The themes of the conference take a social systems approach to the dilemma of the co-constitutive nature of energy access and the resultant issue of waste. The workshops and participatory sessions will focus on how to enhance effective energy access across the Global South (whilst smoothing the path to low carbon transitions) and at the same time address the series of challenges linking access to waste:

- 1) How to enhance sustainable access to modern energy services as SDG 7 requires us to do without building an entire new set of parasitic (in this case waste-evolving) mechanisms that offset the gains?
- 2) How to prioritise and build effective economic models for forms of clean, sustainable energy production that use already-generated waste (e.g. Biogas, AD) and thereby bring substantial value-added?
- 3) How to revolutionise pre-existing foci of the low carbon energy agenda (e.g. clean cookstoves and biomass use) that are particularly problematic examples of the waste-access nexus?
- 4) How to build sociocultural waste (energy inequality, gendered access, energy injustice) into a more complete vision of access, beyond mere coverage?
- 5) How to bring Theories of Change to bear on the waste-energy nexus in developing effective and sustainable energy interventions?

The joining of the University of Strathclyde’s internationally-famous energy programmes with the LCEDN’s well-known sociotechnical focus on low carbon energy transitions will represent a critical space for researchers, NGO practitioners, the policy community and private sector to engage with each other to work on practical interventions and solutions.

## Draft Programme:

### Wednesday May 1st

Optional – **Strathclyde Images of Research: Innovation for Global Good** (Evening)

This annual competition brings the research conducted at Strathclyde to a wider audience. This year’s theme is **Innovation for the global good** will highlight Strathclyde’s endeavours to address today’s global challenges, demonstrating the impact of the research in supporting society to become more resilient and inclusive.

*(registration details to follow)*

### Evening social event

### Thursday May 2nd

#### 9.30 Opening Plenary

9.30 - 9.40 Intro: Stuart Galloway (University of Strathclyde) and Ed Brown (Loughborough University)

9.40 - 9.55 David Hope Jones (Scotland Malawi Partnership) – Delivering Impact through Partnerships

9.55 - 10.15 Ben Campbell with Gina Porter and Raihana Ferdous (Durham University) - ‘Energy Access among informal settlers in four capital cities of the Global South.’

10.15 - 10.30 Mr Mohammed Abdul Gofran (CEO Bangladesh Biogas Development Foundation) – New Perspectives on Biogas in Bangladesh

10.30 Tea and Coffee

#### 11.00 Concurrent Session One

<b>Session 1A The Potential for Biogas/AD to Improve Energy Access and Reduce Waste in the Global South</b>	<b>Session 1B: Data in Energy Projects: Information is Power?</b>
Session Lead: Jon Cloke (Loughborough University)	Session lead: Jamie Cross (University of Edinburgh)

<p>Speakers:</p> <p><b>Md Abdul Gofran</b>, CEO Bangladesh Biogas Development Foundation (<a href="http://bbdf.org/">http://bbdf.org/</a>) - The Potential of Biogas/AD in Bangladesh</p> <p><b>Kevin Kinusu</b>, Kenya Programme Manager, ABPP (<a href="https://kenyabiogas.com/">https://kenyabiogas.com/</a>) The African Biogas Partnership Programme – Needs and Wants (<b>by Skype</b>)</p> <p><b>Discussion led by Raihana Ferdous</b> (University of Glasgow)</p> <p><b>First Break-Out Session: Driving Change for the KBP:</b> Using a 2 -page KBP ‘forward vision document’ and a wish-list for developing the ABP and its’ agenda participants will dissect the two-pager and wish-list and use their expertise to try and develop an action plan, with possible collaborations, funding ideas etc., as the first break-out session.</p> <p><b>John Maina</b>, Executive Coordinator of SCODE (<a href="https://scode.co.ke/">https://scode.co.ke/</a>) Grassroots Biogas – the work of SCODE in Kenya (by Skype)</p> <p><b>Second Break-Out Session: Driving Change for Community Biogas in Kenya:</b> (discussion led by <b>Jennifer Dickie</b> (University of Stirling). Using the ToR for the planned 4MW plant in Nakuru (including use of faecal sludges, cleaning water and the production of fertilizers) participants will brainstorm the project with the aim of providing research recommendations, funding possibilities, collaborations etc. toward the realization of the SCODE plant</p>	<p>Speakers:</p> <p><b>Jamie Cross</b> (University of Edinburgh) - Jamie will speak on questions of data access, control and ownership.</p> <p><b>Tawachi Nyasulu</b> (University of Strathclyde) - Tawachi will speak about the Mawaingu Wifi project and on data and IT developments in Kenya.</p> <p><b>Matt Leach</b> (University of Surrey, <b>Ed Brown</b> (Loughborough University) and <b>Nigel Scott</b> (Gamos) will speak on technical and social science approaches to data collection in the new DFID-funded Modern Energy Cooking Services programme</p>
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1.00 Lunch - OPEN Poster Session

**2.00 Concurrent Session Two**

<p><b>Session 2A Workshop: Designing Modern Energy Cooking Services</b></p>	<p><b>Session 2B: Energy Storage Challenges</b></p>
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Session lead: Stuart Galloway (University of Strathclyde)

Speakers:

**Jonathon Bowes, Alfie Alsop and William Coley** (University of Strathclyde)

Session will cover basics of Modern Energy Cooking Services, with discussions in context of cultural, economic and focusing on nature of electricity supply.

Participants in this session will be presented with the challenges and opportunities for Modern Energy Cook Systems across main grid and off-grid contexts and a user-centred approach to design, adoption and integration will be worked on together

**Amanda Chapple** (Energy savings Trust, LEIA) will present on the inaugural Efficiency for Access Design Challenge that will run in the academic year 2019

Session lead: Jonathan Radcliffe (University of Birmingham)

Speakers:

**Jonathan Radcliffe** (University of Birmingham) - Jonathan will talk about the latest state of energy storage research in the UK and its implications for development challenges

**Declan Bryans** (Strathclyde) - to be confirmed. Declan will talk about his work on characterising redox flow battery technologies and their potential applications.

**Paul Connor** (University of St Andrews). Paul will speak about the Faraday Institute's work in this area.

**Xinfang Wang** (University of Birmingham) Xinfang will speak about Birmingham's work on energy storage with Mexican communities.

3.30 Tea and Coffee

#### 4.00 Third Concurrent Session

<p><b>Session 3A: The Future of Modern Energy Cooking Services: For Who, by Who and How?</b></p> <p>Session lead: Ed Brown (Loughborough University)</p> <p>Speakers:</p> <p><b>Ankit Agarwal</b> (LTS International Ltd)</p> <p><b>Ed Brown</b> (Loughborough University) - Ed will give an overview of the ambition of the MECS programme and some of the broader thinking that underpins it.</p> <p><b>Magi Matinga</b> (Dunamai Energy) – Magi will speak on ‘ the challenge of the normal in energy transition.’</p> <p><b>Charlotte Ray</b> (Independent Consultant) - Charlotte will draw on her experiences of research into the barriers to cookstove take-up.</p>	<p><b>Session 3B Workshop: Community Energy Systems - Translational Learning Opportunities</b></p> <p>Session leads: Damien Frame (University of Strathclyde)</p> <p>Speakers: <b>Damien Frame</b> (Strathclyde) <b>Chris Morris</b> (Local Energy Scotland)</p> <p>Facilitated discussions exploring the 2-way learning opportunities possible between community energy systems in the UK and those in developing countries.</p> <p>In countries where current electricity infrastructure only reaches a small proportion of the country, there is the opportunity for an energy access ‘technology leap’, deploying innovative technology and market arrangements to increase energy access through decentralized RE solutions. Indeed, smart local energy systems could be deployed with much greater speed and less complexity where existing grid infrastructure is absent.</p> <p>With both Scotland and Malawi recently publishing energy strategy/policy documents that place a strong focus on the contribution of decentralised energy solutions there exists an excellent opportunity for partnerships between Scotland and Malawi to develop local energy infrastructure in parallel, with shared learning and cross fertilization of innovative ideas. This case-study will be used to stimulate group discussion on the broader concept of such 2-way learning, considering the challenges and opportunities that may arise in a range of contexts.</p>
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5.30 End of Day Plenary

5.45 Close

## Evening – Conference Social

## Friday May 3<sup>rd</sup>

### 9.30 Friday Plenary: Strathclyde International Development Showcase

9.30 - 9.35 **Stuart Galloway** (University of Strathclyde) - Introduction

9.35 - 9.55 **Anja Lowit** (University of Strathclyde) - Strathclyde International Development Research

9:55 – 10:05 **Scott Strachan** - Strathclyde projects: VIP

10:05-10:20 *The UK Energy and International Development Funding Landscape: An Overview*

**Alice Goodbrook** (Innovate UK)

**Daniel Robinson** (ESRC)/GCRF) (via skype)

**Ed Brown** (Loughborough University)

10:20 – 10.30 **Elisa Morgera** - Strathclyde projects: One Ocean Hub

10.30 Tea and Coffee

### 11.00 Morning Session - Theory of Change Workshop (Valeria Izzi, University of Edinburgh)

Theory of Change (ToC) is an approach to the design, monitoring and evaluation of development programmes. It has gained popularity in development circles over the last two decades, partly as a reaction to the widely perceived limitations of traditional tools in reflecting the complexity of social change. Simply put, a ToC can be defined as a description of how and why a desired change is expected to happen in a particular context at a particular time.

This session is aimed at academics at academics and researchers and it will be of particular use for researchers planning to apply to targeted funding (e.g. GCRF calls).

### 1.00 Lunch + SFC Posters

### 2.00 Fourth Concurrent Session

<b>Session 4A: Energy on the Move Initiative</b>  Session lead: Ben Campbell (Durham University)  'Energy Life Histories, Energy Resilience Narratives, and Energy Social Worlds among informal settlers in four capital cities of the Global South.'	<b>Session 4B: Energy Resilience</b>  Session lead: Simon Trace (Oxford Policy Management, UK)  This session will be a deep dive into energy resilience from a community perspective. The short presentations will focus on Malawi as a case study. We will also reflect on the impact of Cyclone Idai, which
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<p>Speakers:</p> <p><b>Ben Campbell, Gina Porter, Cherry Leonardi and Raihana Ferdous</b> (Durham University)</p> <p><b>Fatima Adamu</b> (Usman Dan Fodio University, Nigeria) and <b>Plangsat Bitrus Dayil (Jos University (by Skype))</b></p> <p>Energy on the Move has been gathering information on energy practices in informal settlements (in Bangladesh, Nepal, Nigeria, and South Sudan), on the problems of access not only in relation to grid supply but also lack of projects working on renewables. The research design and findings have been shared with diverse stakeholders at Country Consultative Group meetings, where perspectives have been exchanged, and policy gaps recognised such that grassroots innovations can be better assisted. A strong lesson concerns the place of energy in the language of the poor regarding urban infrastructure services.</p>	<p>affected the southern part of Malawi, on energy access.</p> <p>The presentations will be followed by discussion on research questions identified during recent collaboration workshops and consultations in Malawi.</p> <p>Presenters:</p> <p><b>Collen Zalengera</b>, Mzuzu University, Malawi – Unpacking energy systems vulnerability and actions for resilience: lessons from Malawi <b>(by Skype)</b></p> <p><b>Aran Eales</b>, University of Strathclyde, UK - Case study insight on Political, Technical, and Economic interventions to promote Energy and Community Resilience in Malawi (presentation)</p> <p><b>Long Seng To</b>, Loughborough University, UK – Research collaborations on community energy resilience and electricity systems in Southern Africa (presentation and structured discussion)</p>
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### 3.15 Tea and Coffee

### 3.30 Second Afternoon Session

<p><b>Session 5A: Access and Waste: Points of Connection Between the Transport and Energy Research Communities</b></p> <p><b>Session lead: tbc</b></p> <p>Speakers:</p> <p><b>Gina Porter</b> (Durham University). Gina will focus on <i>Thinking about the energy-transport-ICT nexus in sub-Saharan Africa'</i> drawing on her community peer-research approach.</p>	<p><b>Session 5B: UK Support for Innovation</b></p> <p><b>Session lead: Ed Brown (Loughborough University)</b></p> <p>Speakers:</p> <p><b>Alice Goodbrook</b> (Innovate UK) Learning from the Energy Catalyst – From EC4 to EC7</p> <p><b>Charlotte Ray</b> (Independent Consultant) UK Innovation for Development? The Case of Energy Catalyst</p>
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<p><b>Ed Simpson</b> (SOAS) 'Thinking through barriers to low carbon transport in South Asia and Sub-Saharan Africa'</p> <p><b>Jeff Turner</b> (Theme leader, Gender, Inclusion and Vulnerable Groups, DFID High Volume Transport Programme/Independent Consultant) - <i>"Opportunities for research collaboration between energy and transport around Low Carbon Energy &amp; Inclusion"</i></p>	<p>Company Experiences:</p> <p><b>Joel Chaney</b> (Creativenergy)</p> <p><b>Nigel Scott</b> (Gamos)</p> <p><b>Stewart Muir</b> (Energy Savings Trust)</p>
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#### 4.45 End of Day Plenary bringing together the strands and exploring future directions