

Natural Bridge: Exploring business-led action from nexus thinking

15-16 April 2015
Selwyn College, Cambridge

Meeting summary

Natural Bridge is an annual event as part of the Natural Capital Leaders Platform that aims to bridge the private sector with other communities, including the investment community and policy makers. This year we explored the bridge between business and academia as part of the [Nexus Network](#). Excellent work is being undertaken within our universities that could be of interest to business, and business may also have particular questions that academic research can help find answers to. At this event we explored where the synergies and common interests lie, with a focus upon the nexus of food, energy, water and the environment and through specific commodity lenses. Through this event, we stimulated and consolidated some future research needs for business with academia, such that it is applicable and impactful for the private sector.

The event accommodated a broad mix of 40 people, 50 per cent representing the private sector and 50 per cent academia. We witnessed a real combination of minds that crossed the business-academia divide and broke down multi-sector and disciplinary boundaries. Fruitful discussions often yielded more questions than answers but these can stimulate future research ideas and encourage funding into areas that are impactful for business.

The event demonstrated the value of assessing future risks through a nexus lens and considering both the impacts and dependencies upon food, energy, water and the environment. The event was supported by ESRC who have been central to bringing a network together to explore nexus thinking. CISL's role in this network is to encourage discussions that can feed into research and push for collective leadership; advocacy from business, academia and policy makers will enable the consolidation of research needs, application and impacts.

The evening and dinner introduced nexus thinking with an inspirational speech from Prof Lord Martin Rees in the gardens of Selwyn College. The concept of a 'natural bridge' between business and academics was introduced by Dr Bhaskar Vira over dinner, and stimulated many interesting discussions between these two communities.

The morning of the full day workshop provided participants with both an industry and academic perspective of the nexus with presentations from Ian Ellison, Jaguar Land Rover and Grant Kopec, University of Cambridge. This set the scene for [Nexus2020](#), where participants explored their most important questions for business around food, water, energy and the environment. Following this, three business members presented their take on the nexus with a specific commodity focus, grounding participants in real situations where action is needed by the private sector, these were:

- Business challenge on cotton Laura Babbs, Asda
- Business challenge on dairy Andy Richardson, Volac
- Business challenge on timber Peter Gardiner, Mondi

The afternoon of the workshop saw participants grappling with the nexus issues in groups for each of these commodities. This resulted in each group making recommendations to prioritise action based upon a nexus analysis.

The key themes that were discussed during the event are hereby summarised.

Defining the nexus: from global to local

The Nexus Network brings about transdisciplinary discussions and galvanizes relationships to enable knowledge exchange and the identification of knowledge gaps. The demand for food, energy and water in a world of increasing environmental pressures at a global level can be felt across industrial sectors, from agri-businesses to retailers to the automotive industry and utility providers. Businesses impact and depend upon elements related to food, energy and water demand at a global level and they also depend and impact upon very local natural capital elements including soil, water and biodiversity; these are all interlinked. This was demonstrated by the presentation from Ian Ellison of Jaguar Land Rover, who recognised the need to be self-aware of nexus elements that extend beyond tail-pipe emissions for the business to be successful.

Modelling nexus issues can be valuable in different ways and on different scales. The University of Cambridge's Foreseer Project models water, energy and food demands across landscapes and illustrates the how trade-offs are influenced by decision-making. Analysis of the water and energy policy conflicts in China, presented by Grant Kopec of the University of Cambridge, showed how looking at the nexus can reveal significant insight at a policy level as well.

Nexus thinking and its significance for business

Nexus issues are not necessarily front of corporate minds but effects are being felt at different parts of value chains and have implications for securing licenses to operate, brand reputation among other factors. In the face of today's changing consumption patterns, growing populations and climate change impacts, nexus issues are in fact extremely relevant for companies across a diversity of sectors.

The right metrics need to be considered to avoid shifting the burden from one element (for example carbon for energy production) across to other impacts or other dependencies (for example water). Adopting a holistic perspective will ensure that metrics truly account for a whole system's impacts.

While some companies, such as retailers, are part of complex supply chains and are 'a tiny cog in a whole industry', others have very integrated supply and value chains that require landscape level management. Trade-offs within the landscape are inevitable and may result in short-term commercial losses but are crucial to securing supply and can result in long-term gains. On the demand side, customers have a tendency to expect that the practical aspects of sustainability are to be embedded in products and businesses realise that 'sustainable products' have different interpretations for businesses (e.g. certified products, organic products etc) and for customers (e.g. the use of resealable bags to store food products).

Formulating research questions

Bridging academic and business interests requires research questions to be formulated in such a way that they are both academically researchable and business relevant.

Members of the business, academic, policy-maker and civil society communities are able to put forward a myriad of issues related to business practices and management of impacts and dependencies. But are these business issues being translated into questions that are actually researchable? Participants explored three different steps to help formulate business issues into questions. On the next page is an example of the process that participants on one of the interactive tables went through to establish one set of questions relating to a particular business issue they were interested in:

Each group found nexus thinking helpful but recognised the need to ensure that the different nexus ideas are translated into something useful in regards to core business issues. There was agreement that this is not just an issue for big business but that farmers on the ground need to understand the larger nexus issues that are at play and recognise that shifting the burden onto other resources is unsustainable and unproductive in the long term. There was an acknowledgement from participants that nexus thinking could be seen as too complex and hampered by uncertainty; it could even stall action and confuse already challenging issues. Thus clarity on nexus pathways and business priorities is vital so as not to paralyse companies with complexity.

Next steps

1. **ARCs:** Action Research Collaboratories are translating some of these nexus questions into practical natural capital issues and explore the need for long-term impact and dependency strategies. CISL's three current ARC projects include an in depth look at current initiatives and interventions around the production of dairy, cotton and boreal timber.
2. **ALIGN:** Now more than ever, there is an urgent need for action linking growth and nature (ALIGN) that consolidates business growth with safeguarding natural capital. For the importance of natural capital to be endorsed and embedded within businesses, the case for investment needs to not only be made, but be proven and evidenced through rigorous science. CISL is developing, with business, the ALIGN project which seeks to illustrate how investing in natural capital action can generate financial returns and positive public outcomes for healthy landscapes.
3. **Nexus2020:** The Nexus2020 project will gather the top research questions to help businesses better manage their impacts and dependencies. You can submit more questions online [here](#) and find out more on the [website](#). We are happy to run a node with you or provide you with materials to share and promote the project yourselves.



The [Nexus Network](#) is a three-year initiative to foster debate, innovative research and practical collaborations across the linked 'nexus' domains of food, energy, water and the environment. Participation in the network is open to researchers from all disciplines, and to decision makers in government, business and civil society.



The Nexus Network is funded by the [Economic and Social Research Council](#) (ESRC) and is being coordinated by a team from the University of Sussex, University of East Anglia and University of Cambridge Institute for Sustainability Leadership.

Event participants:

Name	Title	Organisation
Adam Graveley	Group Sustainability Coordinator	Value Retail Plc
Adrian Greet	Global Sustainability Programme Director	Mars Incorporated
Alison Cairns	External Affairs Director (UK and Ireland)	Unilever
Andrew Richardson	Head of Corporate Affairs	Volac
Ann Bruce	Agri-Food Knowledge Exchange Fellow	University of Edinburgh
Audrey O'Shea	Sustainability Manager	Glanbia Dairy Ingredients Ireland
Barruch Ben-Zekry	Sustainable Products and Materials Director	VF Corporation
Bhaskar Vira	Conservation Research Institute Director	University of Cambridge
Bianca Shead	Sustainable Development Policy Manager	SABMiller Plc
Charlotte Williams	Group Sustainability Manager	Tesco
Christopher Jones	Environmental Psychologist	University of Sheffield
Colm Bowe	Lecturer in Plant and Environmental Science	Liverpool John Moores University
Darrell Yarwood	Archer Daniels Midlands	Archer Daniels Midlands
Dilys Williams	Director of Centre for Sustainable Fashion	University of the Arts London
Gemma Cranston	Programme Manager	CISL
Grant Kopec	PhD Candidate Foreseer project	University of Cambridge
Hannah Tranter	Project Manager	CISL
Ian Bateman	Director	CSERGE
Ian Ellison	Sustainability Manager	Jaguar Land Rover
Inder Poonaji	Head of Sustainability	Nestlé UK
Jake Reynolds	Director of Business and Policy Leaders Groups	CISL
James Wilsdon	Professor of Science and Democracy (SPRU)	The University of Sussex
John Pharoah	Project Manager	CISL
Jonathan Green	Research Associate	University of Cambridge
Katharine Thoday	Independent Advisor	Independent Advisor
Laura Babbs	Sustainability Manager	Asda Stores
Liz Crosbie	Managing Director	Strategic Environmental Consulting
Lorna Friis	Programme Manager for the Nexus Network	ESRC
Lynn Dicks	Postdoctoral Research Associate	University of Cambridge
Mark Sumner	Lecturer in Sustainable Design	University of Leeds
Martin Rees of Ludlow	Fellow of Trinity College and Emeritus Professor of Cosmology and Astrophysics	University of Cambridge
Martin Roberts	Director of Natural Capital Leaders Platform	CISL
Neil Burns	Group Head of Sustainable Development	Mondi Group
Paul Smith	Associate Director Environment Health and Safety	Coca-Cola Enterprises
Peter Gardiner	Natural Resources Manager	Mondi Group
Rosamunde Almond	Executive Secretary	Cambridge Forum for Sustainability and the Environment
Ruth Welters	Communications and Impact Manager for the Nexus Network	The University of East Anglia
Sarah Bell	Warburtons Technical Manager	Openfield
Stephen Lawler	Group Director of Sustainability	Value Retail Plc