



Working Paper Five:

**Knowledge Exchange, 'Impact' and Engagement: Exploring Low Carbon Urban Transitions**

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# **Knowledge exchange, 'impact' and engagement: exploring low-carbon urban transitions**

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This paper engages with recent discussions about new requirements for the consideration of the 'impact' of research by the UK research councils, and in the forthcoming Research Excellence Framework (REF). The paper argues that the need to consider impact should be critically welcomed, and, given that research is always subjectively evaluated, for academics to take a broad, rather than self-limiting conceptualisation of what constitutes impact in their research funding bids and submissions to the REF. The paper argues that the emerging Knowledge Exchange (KE) agenda provides a welcome mechanism for funding critically engaged research with real world partners on a participatory basis, and explores experiences of one such KE partnership, Low Carbon Liverpool, to discuss potentialities and problems.

**KEY WORDS:** Liverpool, UK, low carbon transitions, impact, engagement, neoliberalisation, universities

## **Introduction**

The recent requirement by the UK research councils for those bidding for research funding to demonstrate the social and economic impact of their proposed research and the associated assignment of 20% of the Research Excellence Framework (REF) for research that can demonstrate 'any social, economic or cultural impact or benefit beyond academia' has provoked much debate amongst geographers (see Pain et al. 2011 2012; Slater 2012). This paper argues that given the currently fairly unprescriptive guidance of what constitutes impact as codified in (for the UK at least) REF guidance, critical academics doing engaged work have an opportunity to contest and contribute to the production of understandings of what does or does not constitute 'impact'. It argues that RCUK Knowledge Exchange (henceforth KE) funding is a fruitful opportunity through which to carry out socially engaged

and participatory research. To engage with impact is not to slavishly reproduce the audit culture or to neglect more traditional academic pursuits. In this context, it should be recognised that some more traditional research practices that paid no regard to impact, particularly in elite universities, did reproduce the social hierarchies that critical geographers challenge.

This paper uses an example of a recent KE project to explore these issues. Low Carbon Liverpool is an Economic and Research Council (ESRC)-funded KE partnership founded in 2010 between researchers at the University of Liverpool, Liverpool Chamber of Commerce, Liverpool Vision (Liverpool City Council's economic development company) and Groundwork Merseyside (an environmental NGO)<sup>1</sup>. Within the limits set by the ESRC's KE funding mechanisms, the project was co-designed by the partners in terms of the identification of research questions, research methodologies and use of participatory processes of local policy formation. It explored how Liverpool's economic development agencies could effectively facilitate the move to a low carbon economy in a city which had recently fairly successfully rebranded itself as a thriving visitor destination through its year as Capital of Culture (Garcla et al. 2010), although fundamental problems around social exclusion remain (Boland 2010). It asked, does the city have the right policies to combine a healthy, vibrant and socially

inclusive local economy with what cities need to do to avoid dangerous climate change in the future, and minimise use of scarce resources? What more needs to be done? Specifically, it explored how the agencies could support local small businesses and social enterprises to reduce their energy use and carbon footprint, what low carbon sectors the city should invest in, and how to ensure that residents in communities suffering from multiple deprivation and entrenched social exclusion benefitted from new low carbon opportunities.

The methodology of the project consisted of a period of participant observation in which researchers observed the policy process 'in action'; a series of seminars involving a wide cross section of the city's NGOs and other civil society actors to explore specific issues around the transition to a low carbon economy; interviews and focus groups with businesses and social entrepreneurs and local policy makers; and an 'impact-generating' report (to use ESRC's terminology) to provide concrete policy recommendations (North and Barker 2011). Findings were co-produced through the seminars where examples of what was regarded as good practice were presented to a wider audience of policymakers, support agencies, and other civil society actors, followed by discussions using participatory methods which explored the extent that the ideas presented might or might not work in the city<sup>2</sup>.

The findings of these seminars were supplemented with more conventional interviews and focus groups with local businesspeople and social entrepreneurs who were taking action on

low carbon issues, with support agencies, and with a wider analysis of the literature (including web-based resources, grey literature, and conference papers and presentations). The final report and a series of policy briefs, co-written with partners, were published in paper and electronic forms, and presented to policymakers and our seminar participants at an event hosted by a local radio commentator. We continued to work together to act on the project's recommendations once the original 1-year project had ended before, in 2011, a bid for ESRC follow-on funding for 2012–13 was successful.

For the academics, the project facilitated access to the 'back room' of local agenda setting and policy formation in return for supporting policy partners to flesh out what a low carbon agenda for the city would look like, thus meeting their needs. This 'back room' is an area that is often opaque to outsiders with the result that academic understandings of how agendas are defined, what ideas are accepted and rejected, and how agendas are transformed into policy programmes is limited. The paper therefore discusses the extent that KE enabled partners to come together to address questions that they were all interested in, how partners were able to co-operate to ensure that each partner was able to address their specific issues, and how each learned from each other. Finally the paper examines how processes of KE enabled the questions to be answered and a low carbon agenda for the city to be developed.

### **Impact: a politics of possibilities, or of limits?**

Rachel Pain, Mike Kesby and Kye Askins (2011 2012) cautiously welcomed the impact agenda, arguing that progressive academics wanting to support social change would want their research to have an impact. They argued for the co-production of research between academics and partners outside the academy, based on participatory geographies through which academics meld their theoretical perspectives and research skills with partners not only to do research that benefits both, but to co-produce the identification of the focus of the research, who the research should engage with, what questions should be asked, what data say, and what the research findings mean. They rejected accusations that they were acting as apologists for the neoliberalisation of the academy, and abandoning critique (Slater 2012).

While there is obviously a danger that elite-set definitions of what constitutes impact could be limited to what is deemed to support neoliberalisation, economic competitiveness, and the production of docile regulated bodies, Pain and her colleagues rightly recognise that what has 'impact' or is 'relevant' is politically constructed (Staeheli and Mitchell 2005) and can be contested. While some argue for resistance to what they see as unreasonable limits on academic freedom, the right to think feely about issues that have no immediate relevance or observable utility (Boden and Epstein 2011), it is possible to argue for the

impact of research to be considered, where that is appropriate, and to value curiosity, independence and academic freedom for their own sakes (Phillips 2010). At this juncture, what actually constitutes impact is not tightly specified either in the REF or by the Research Councils. REF guidelines define impact rather loosely as ‘an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia’. Impact will be judged by its ‘reach and significance’ and:

includes, but is not limited to, an effect on, change or benefit to: the activity, attitude, awareness, behaviour, capacity, opportunity, performance, policy, practice, process or understanding of an audience, beneficiary, community, constituency, organisation or individuals in any geographic location whether locally, regionally, nationally or internationally<sup>3</sup>.

This is far from a constricting definition. Further, given that assessments of the quality, rigour and significance of research, despite successive attempts to provide objective criteria, are always subjective in the final analysis (Johnston 2008), critical academics with an interest and commitment to engagement with actors outside the academy with an eye on changing things for the better have an opportunity to structure understandings of what constitutes impact from below as they develop impact case studies for the REF<sup>4</sup>. The interface between academic and policy work, and between academia and activism, can be particularly productive spaces through which to create these knowledges through KE practices. Given that impact constitutes 20% of the REF, arguments that policy-relevant or engaged research is not always valued by the forces that structure academic production and by the professionalisation of the academy (Castree 2000, 961) are perhaps less valid than they have been. Again, this is space that can be colonised from below.

The evolving impact agenda therefore potentially provides an opportunity for engagement, and the rules of the game are changing and have not yet solidified. If there is a danger that impact could be defined in time in more narrow ways and refined as a tool for disciplining the neoliberal academy, critical geographers will not advance their agendas by giving up ground at the beginning of the battle, withdrawing into a priestly solitude, letting others decide what constitutes observable impact and how to measure it. Bewailing the perceived neoliberalisation of the academy in print, but not contesting it through practice, is inadequate. As critical geographers, we should argue for and demonstrate that locally grounded work with local partners, not just that aimed at policy elites, can have reach and significance by embracing a ‘politics of possibilities’ (Gibson-Graham 2008), not a politics of barriers and domination. Engaged research from this perspective would focus on opportunities and potentialities rather than seeing the requirement to demonstrate impact as a barrier to carrying out socially engaged research. Recognising that what constitutes good research is a judgement of those that do and evaluate it, critical geographers should

argue for and perform as wide a conceptualisation as possible of what has 'impact' and is 'relevant'.

### **Impact, policy work and academic freedom**

This is not a new debate, and in a critical engagement about what constitutes impact critical geographers have shoulders to sit on that enable us to see further. Over the past decade a series of papers in the geographical literature have debated the interrelationship between 'pure' or 'theoretical' research disseminated through RAE/REFable publications aimed at the academy and perhaps (bright) students, which might not ostensibly seek an observable real world impact; and 'applied' or 'policy' work which more obviously fits with the impact agenda. Jamie Peck (1999) bemoaned the lowly status of these policy-orientated 'grey geographies'. A series of papers followed debating the extent that there was something fundamentally wrong with geography if its work lacked influence in policy circles, and hence impact. In 'Progress', Doreen Massey (2001) described herself as 'fed up' that geography and geographers had so little influence on the development of policy in even so geographically seminal an issue as the existence (or not) of a north/south divide in the UK, despite 20 years' work on the subject (Massey 2001). Ron Martin (2001) argued that geographical research lacked impact as a result of its 'emphasis on 'sexy' philosophical, linguistic and theoretical issues rather than on practical social research'. He condemned 'the retreat from detailed, rigorous empirical work; the intellectual bias against policy studies; and the lack of political commitment'. Martin (2001, 190) asked what was the point of developing critical social science if this knowledge is not used to improve social, economic or environmental conditions? Similarly, Chris Hamnett (2003) was concerned about geographers engaging in closed, often wilfully obtuse language games, which he described as 'something that can safely be ignored while the grownups get on with the business of changing the world, often for the worst'. He argued that the Marxist-inspired 'new geography' of the 1960s and continued in the 'critical geography' tradition since (Castree 2000), was far more concerned with social justice in the 'real' world than later literature inspired by the cultural turn. For balance, Castree also recognised that although critical geography had a focus on changing rather than just interpreting the world, not all critical geography was focused on making an immediately observable impact outside academic debates. Many critical geographers focused on scholarship and theory, influencing how universities and the academic production process worked, and on changing the world in the future through teaching that influenced future policymakers' decision making and policy choices (Castree 2000). This focus should, of course, be defended and valued on its own terms.

From a different perspective, Dorling and Shaw (2002, 632) argued that too few geographers focus on achieving political change or communicating with the world 'out

there'. If geography lacked influence, they argued, this was because it did not explain itself in ways that policymakers found convincing, which for them meant quantification. Not all agreed that the answer was quantification, or that good, qualitative studies did not have an impact on policymaking. Banks and MacKian (2000) and the team at Birmingham's Geography department (Pollard et al. 2000) argued that if they wish to engage with partners, geographers do have the opportunity to make an impact on policy formation in geographically related areas. The charge of a lack of interest in policy work is misplaced.

Rachel Pain (2006) forcefully rejected a number of what she called false dualisms, especially those between so-called free, pure, critical theoretical or activist-focused work, and policy work characterised (caricatured) as the uncritical analysis of elite-set agendas, of no theoretical interest, and with no impact on social change for the better. Policy work, she argued, can be as world changing as activist work. Kevin Ward (2005 2007) therefore argued for a broader conception of the 'policy community' that includes NGOs, community groups and activist communities.

Activist geographers (Blomley 1994 2008; Chatter-ton 2002; Tickell 1995) have for some time engaged with social movements, not only reporting on their struggles, but actively identifying themselves with the social movements they work with, and working to ensure that the academy relates to and supports social struggles. Activist scholars have carved out spaces from which geographers can support social struggles with their time, theoretical perspectives, and the resources of a university. This should not easily be forgotten or given up. Here, how questions were identified, how research was done, and who benefited from or was empowered by participation in the research process were as important as on whose behalf the research was undertaken, who research findings were disseminated to, or who acted on them. Could the practices of research challenge unequal power relations through how it was done and by whom, as well as through its findings (Cahill 2004)?

Consequently, an increasing number of geographers have sought to work in participatory ways (Kindon et al. 2007), and the Participatory Geographies Research Group of the Royal Geographical Society (with the Institute of British Geographers) takes this work forward. It is this work that leads some to challenge conceptions of impact that see it as the passive, one-way take up of so-called 'excellent' research by the world 'out there', calling instead for geographers to engage with partners to co-produce research that aims to have an impact on real world problems with colleagues outside the academy.

There is perhaps a missing element in the discussion to date: the new emphasis in Research Council funding on KE and on what the councils call 'Impact Generating Activities'. The ESRC describes KE as a 'two-way process' through which 'social scientists and individuals or organisations from the private, public and civil society sectors . . . share learning, ideas and experiences'<sup>5</sup>. The ESRC funds partnerships, research projects and other capacity-building

activities that foster mutual understanding between researchers and others in order to inform better policy and to make an impact. Other universities fund vouchers to enable partners outside the academy to access resources in universities.

Ever since E P Thompson's (1970) seminal critique of Warwick University's links with industry, those who focus on work within the academy with no obvious immediate relevance can understandably be resistant to KE for the same reasons as they are concerned about impact. Is working with partners outside the academy, especially on economic issues, another unwarranted restriction in academic freedom, or mere consultancy about a local issue of no wider interest to the advancement of knowledge? However, debates about the relationship between a university and the environment within which it sits go back at least to the creation of many urban or civic universities, many of which strongly focused on engagement with local issues and the improvement of local conditions, as well as the production of knowledge for its own sake. Even the production of useful knowledge itself has not always been purely instrumental, unconcerned with the wider implications of how knowledge is used, and to what end universities exist. My own university, Liverpool, had as its strapline 'for the advancement of knowledge and the ennoblement of life'. There is thus a long history of research undertaken by academics and partners outside that makes a difference, which is founded on research questions that are legitimate in academic terms, add to knowledge, and make a difference to the places in which universities are based and more widely.

### **Exploring low carbon urban transitions**

The transition from a high to a low carbon economy is such an issue. It is a contested and complex multi-scalar process (Geels 2005; Elzen et al. 2004; Grin et al. 2010) in which what goes on in cities and localities affects and is affected by a wider, more systemic transition. What is not fully understood is how local policies are produced, or how governance practices facilitate or retard this transition. Local policymaking is too often seen as a 'black box', opaque to outside scrutiny (Bulkeley 2005). To understand this process properly it is necessary to examine how cities are governed in a complex process of urban 'regime' building through which they develop a capacity to govern (Lauria 1997; Stone 1989 2001; Jonas and Wilson 2000). This requires partnership working between the public and private sectors, and more concretely, what Elkin (1987) called the division of labour between state and market actors in modern cities. This is as true of local climate change policy as of any other domain (Sharp et al. 2011). The public sector can influence, but not command, the actions of private and community sectors.

The issue is further complicated in that, as a result of what David Harvey (2001) called the 'entrepreneurial' turn, cities must compete for mobile capital in an environment where it is



claimed that cheap communications technologies and fuel mean that capital can seek a 'spatial fix' to problems of profitability by moving to places where labour costs are cheaper and levels of labour and environmental regulation lower (Harvey 1992). Cities must make themselves as attractive as possible to footloose international finance. This means foregoing any 'costly' social or environmental programmes or any forms of regulation likely to be conceptualised as a 'burden on business' or a barrier to growth (Peterson 1981). City managers have to follow the logic of urban competition by making their city's production costs as competitive as possible and regulations as light as possible, providing infrastructure and making administration business friendly. The city is constructed and marketed to make it attractive to mobile business. The entrepreneurial thesis suggests that city managers will rule out visions of urban futures that do not work within this paradigm, and put crudely, anything that impacts unfairly on local competitiveness will be seen as problematic. In climate change terms, the private sector is viewed negatively as a block on progress. Competitive cities need to grow and nothing must be done to jeopardise this – policies to limit emissions included.

Thus although many thoughtful city managers are aware of long-term issues like climate change and energy security, growth cannot be challenged. Sophisticated alternatives to growth developed by the Sustainable Development Commission under the last government (Jackson 2009) or conceptions of degrowth (*décroissance*) or steady state economies (Victor 2008; Daly 1996) have yet to be translated into viable city strategies that can compete with the entrepreneurial cities thesis (North 2009). With few exceptions, rather than develop alternatives to growth or active policies to reduce emissions, city managers focus on infrastructural improvements to enable them to adapt to a changing climate (Bicknell et al. 2009). Ecological security, protecting cities from disasters, becomes a new urban paradigm (Hodson and Marvin 2009). The entrepreneurial thesis suggests that attempts to cap or reduce carbon emissions will be conceptualised by city managers as something potential investors will see as a dangerous new form of regulation and control (Jonas et al. 2011), or a problematic 'burden on business' and a 'barrier to growth'. Investors will take their money elsewhere.

In an alternative reading, Fitzgerald (2010) argues that too few cities see the economic benefits of climate change: in particular the benefits of investing in high paying jobs in renewable energy technologies, energy efficiency as a boost to competitiveness, or the benefits of public transport and green infrastructure. Conventional discourses of sustainable development growing out of the Brundtland report have long looked to balance economic growth with social inclusion and environmental protection (Gibbs 2002). Conceptualisations of 'smart growth' look to identify ways to grow economies that are 'emissions light' (Krueger and Gibbs 2008). More thorough transformation of the economy is envisaged through ecological modernisation, where the economy is switched from an industrial to an

ecological mode which pays attention to its reducing carbon flows and preserving the resource base on which economic activity depends through the diffusion of clean technologies (Gibbs 2000; Mol et al. 2009). Thomas Friedman (2008) is positively evangelical about the creativity of capitalism as a mechanism for solving problems associated with climate change. He argues that humanity needs to:

*mobilise the most effective and prolific system for transformational innovation and commercialisation of new products ever created on the face of the earth – the US marketplace. There is only one thing greater than Mother Nature, and that's Father Profit, and we have not even begun to enlist him in this struggle. We don't need a Manhattan Project for Clean Energy: we need a market for clean energy.* Friedman 2008 (243–4)

Thus, those with more faith in capitalist creativity argue that solving problems associated with climate change will become a new accumulation strategy underpinning continued capitalist development (Buck 2006).

So while some characterise the private sector as a fundamental barrier to low carbon transitions at a scale that will avoid dangerous anthropogenic climate change, others see in capitalism the creative force to solve the climate crisis. Low Carbon Liverpool explored what this means for local economic development strategies at an urban scale that seek to secure a city's continued prosperity, and avoid dangerous climate change. Liverpool is well placed for a study of these issues. It has long been a test bed for a succession of urban policy interventions, and having a history of a global reach as the second city of empire in the nineteenth century to more a more contemporary global reach through its culture and sporting prowess, lessons from Liverpool are of more than just local significance: they have reach and significance for other post-industrial cities (Wilks-Heeg 2003).

### **Benefits and challenges of a KE approach in action: Low Carbon Liverpool**

Are businesspeople always uninterested in environmental issues, driven only by growth and profitability (Parker et al. 2009)? As an alternative to the assumptions of the entrepreneurial thesis, Low Carbon Liverpool was predicated on a politics of positive engagement with actors developing and performing climate change policy at a local scale inspired by the diverse economies perspective developed by J K Gibson-Graham (2008) and the Community Economies Collective. A diverse economies perspective would not assume that local businesspeople, who are also local citizens, are uncritical opponents of actions to mitigate dangerous climate change. Gibson-Graham (2006) argued '(w)e may no more assume that a capitalist firm is interested in maximising profits or exploitation than we may assume that an individual woman wants to bear and raise children, or that an American is interested in

making money'. In this context, we wanted to explore how a 'politics of possibility' might help in our understanding of the move to low carbon economies. We wanted to see if there was a more interesting story to be told by listening to and working with the local private sector (organised through the Chamber of Commerce), with social enterprises (accessed through the agencies supported by Liverpool Vision), and with people working in the communities that the Capital of Culture had passed by. We wanted to engage with, not caricature, local business people to see if a diverse economies perspective on low carbon economic development took us conceptually further.

As researchers who had worked with environmental activist groups, KE facilitated engagement with the wider policy process given that, important though citizen-based activism is, work at a community level could not influence or change unsustainable practices at higher scales: that of the local economy (North and Scott Cato 2012). We wanted to explore the possibilities of working, with open eyes, with officers from local economic development agencies that we knew, trusted, who we felt were also committed to making change, from whom we could learn. Our diverse economies research approach involved opening up the local policymaking process to wider civil society voices and policy experiences from the city and elsewhere through the seminars – voices normally excluded from policymaking. We wanted to explore how perspectives on low carbon local economic development generated by members of low carbon communities and transition towns (Hopkins 2008, 2011) and other ecolocalisers (McKibben 2007; Shuman 2001), for whom a low carbon economy would necessarily be a more localised economy, could contribute to inclusive low-carbon strategies at an urban level (North 2010a). We wanted to explore how local economic policymakers reacted to ideas taken for granted by climate activists (economies should be more local, growth is bad), but which challenged fundamental nostrums of local economic development practice (globalisation is inevitable, growth is the objective) (North 2009). How might economic development practitioners be able to contribute to creating low carbon futures in ways activists could not? This was two-way learning.

Thus we thought of what we were doing as neither purely theoretical research for the academy conducted independently from any users of the research but which might have an impact 'on' them: but neither was it a piece of consultancy delivered for a client. The policy partners wanted help to flesh out what a low carbon agenda would look like, and the academics who wanted to study local policy implementation in place (Peck 1999, 132) were able, in time, to gain access to the policymaking engine room. Our partners could be open with us about what they thought was or was not a practical recommendation given local power relations, and guide us about what they thought would be the best way to make change happen, without closing the door to more radical suggestions that did not seem immediately realistic. They guided the academics as to how to frame their arguments in

ways that would be listened to. Academics asked questions and introduced policymakers to knowledge they did not have. KE processes, we found, enabled all the partners to think a little more deeply and long term than might otherwise be the case, considering how wider structural changes might affect the evolution of the local economy: a key geographical concern. The partnership provided an environment in which to think things through, and as trust grew academics and policymakers began to make better policies. As our partner put it:

*The complexities of the problem (developing responses to climate change at a local level from a standing start), the requirement to build a strong, unified knowledge base and to align resources from many disparate sources around the challenges and opportunities that exist required there to be a long-term process of dialogue, knowledge-exchange, development of a thorough grounding in the science and technological solutions available, and trust and partnership-building.*

Liverpool Vision, personal communication

We did not assume or require that all of the partners agreed with and had to sign up for all the project's findings and recommendations. On the academic side, we could also make recommendations that challenged our partners to go further than they would otherwise have gone. Beyond the core debate about the desirability of 'growth', uncritically conceived, as a driver of local economic development, examples here included introducing contested debates about the extent or otherwise of 'peak oil' (Bridge 2010), about the contribution of small-scale renewable power generation to emissions reduction, or the extent that residents of socially excluded communities could benefit from low carbon restructuring. Sometimes academics and practitioner partners agreed, sometimes not. A key issue was that academics felt strongly that a low carbon strategy must include policies to reduce emissions and resource throughput, and consider the impact of the city economy on other places, other generations, and other species. Economic development and climate change policies should be connected. For our partners 'low carbon' was a way to generate extra jobs and businesses for the city, on top of what was already happening; that is, a source of new forms of growth. We could push the envelope, developing a shared understanding about the need to think about forms of growth that improved wellbeing rather than increasing resource throughput. The issue is still contested, but KE provided a process through which issues could be put on the agenda in ways that consultancy or unengaged research cannot replicate.

Crucially, KE funding provided a mix of academic independence and rigour, resources and methodologies to enable the partners to think more deeply than would otherwise be the case given their busy schedules and time pressures, and a structure in which to co-produce knowledge of interest to both partners. While at the beginning of the relationship we felt that our partners saw us as welcome resources to help them answer their questions, and we

had to make a bargain with our partners in how we framed the research in such a way that they would get their questions answered, in time, we developed a more equal relationship. We challenged, influenced, and learned from each other. Localisation began to be seen in more complex and problematic ways, eventually dropping off the agenda. Our understanding of the contribution the private sector was making increased significantly. Thus we ended the research with far more understanding of and sympathy for the real-life problems of work at the policy coal face. Our partners had been introduced to some more critical thinking on the transition to low carbon, and had been influenced by that. We understood each other's language, felt emotional attachments to each other, and were sympathetic to each other's positions.

We made sure that all partners got what they wanted from the partnership – concrete policy recommendations for policymakers; a deeper understanding of the policymaking process for academics. At the end of the process we really understood that solving problems is as much an issue of political will, of limited resources, and of the slowness of the policy process, as of identifying unproblematically implemented correct technical solutions. We understood why the transition to the low carbon economy is such a contested process, and how science and understandings of what science does or does not tell policymakers to 'do' is so complex (Hulme 2009). When our ideas were not immediately and uncritically taken up, we were not surprised: our partners' knowledge and experience of the local policymaking process helped us understand how to make an impact over the longer term, while academic understandings about the place of local policymaking within wider structural processes helped explain why impact took time to be observed, and explained why, at times, low carbon seemed to be lower down the agenda than when the project started.

A strong rapport developed both between the researchers and our partners from the three agencies, and (something that had not been apparent before the research) between the partners themselves. This rapport continued to be evidenced after the first stage of funding as the partners took responsibility for working up the report's key recommendations, in particular about how to work with SMEs and with social enterprises. A key indicator of impact was acceptance of the recommendation that Liverpool should explore the benefits of making a bid to be European Green Capital<sup>6</sup> as a way to catalyse the transition to a low carbon economy and to encourage partners to continue to work towards a coherent shared agenda – something regime theory suggests is important in making cities function effectively. The successful award of ESRC follow-on funding in 2012–13 recommitted partners to the project, although Groundwork Merseyside had by then become another victim of public sector cuts. In the second phase, Low Carbon Liverpool worked more explicitly through the Chamber of Commerce's

Energy and Environment Committee, and in closer partnership with Liverpool City Council and other agencies, such as the travel authority Merseytravel and the NHS. Local partners effectively took over the Low Carbon Liverpool brand, and took a strategic decision to develop it into a Green Partnership for the city to progress the transition to a low carbon economy in the long term. KE provided a mechanism for exploring policymakers' questions and developing policy in inclusive, more bottom-up ways, enabling academics to access the policymaking engine room and building rapport and trust with policymakers that enabled them to understand the place-specific nature of the transition to a low carbon economy more effectively.

Early signs seemed to be that KE catalysed more long-term policymaking and partnership funding that could outlast ESRC funding. What cannot, of course, be judged is that policymakers would continue to act on the KE project's findings to ensure that it had long-term impact, especially some of its more radical perspectives, once the partnership ended and academics were no longer in the room arguing for them. Agendas developed in other places would also be argued for. Thus in Liverpool, while Low Carbon Liverpool's agenda was accepted as one of the strands of the city's strategy for the transition to a low carbon economy, the newly formed Local Enterprise Partnership continued to support and promote a more conventional, business as usual conception of a new high-tech green economy sector as an addition to the city's economy. Liverpool Vision debated the extent that a bid to be Green Capital would detract from their preferred branding of Liverpool as an entrepreneurial city. Although measurable impact (in REF terms) has been demonstrated and can be evidenced in the adoption of the project's findings into demonstrable policies and actions, the longer term impact of the project was unclear at the time of writing.

## **Conclusion**

Under the impact agenda as currently defined, researchers are asked to think about what impact their research will have in fairly undefined terms. There is a danger that, unless contested, it will potentially be defined by others in rather narrow economic and social terms. Evidencing impact is particularly challenging. This paper argues that what constitutes 'impact' needs to be contested, and that KE is a fruitful, if underdeveloped, path through which to fund engaged work that aims to have an impact in a participatory style, working with non-traditional partners to address academic concerns. KE is not a one-way process of knowledge transfer in which academics do the work, which, being of international quality, will then have an impact because the knowledge is built on a sound basis: the relationship between academic production and policy implementation is far more complex than that. Thus what Low Carbon Liverpool did was far more interactive. KE enabled academics with an interest in local policymaking to gain an understanding that a more traditional research project, with the power relations that entailed, would not have uncovered. KE opens up

space for more participatory, engaged forms of research, coproducing knowledge. KE is in this way a tool for, not an alternative to, working in participatory ways. And non-participatory work can of course have an impact.

KE is not for everyone. Many legitimately argue that their best opportunity to have a world changing impact is through traditional scholarship. As Don Mitchell argues (quoted by Blomley 2008, 286), '(t)o make a difference beyond the academy it is necessary to do good and important and committed work, within the academy'. Research questions around transition to a low carbon economy at an urban level could better be examined in partnership with others involved at a policy level, and the KE route enabled this to happen by facilitating access. The critical element was in introducing radical ideas into the debate, and pushing the envelope of who is involved in policymaking outward to include activists. But working in partnership does have high transaction costs (regular meetings, explaining ideas, listening, doing things that other partners want you to do that do not answer your questions) that cut into both academic and family time. It is not for everyone, especially not for younger academics looking to make a quick early splash. It requires long-term commitment.

It might have been quicker to answer research questions in a more traditional way, but we would not have gained as much depth and the findings would not have had as much impact. Our partners co-produced and owned the findings. We did not have to then disseminate our findings to a perhaps sceptical audience. Pain (2006, 254) argues that policy research that is connected with and designed by a strong local network from the beginning might be more effective than that which aims to get the minister's ear (but ends up on her policy advisers' shelf). Having worked the project up with partners when Liverpool, like most cities, is but starting the transition to a low carbon agenda, Low Carbon Liverpool has been instrumental in engaging partners in a conversation about possible futures, providing a route map to take the transition forward which has been accepted as part of the suite of policies guiding the transition, and the first steps have been taken to mobilise the political will in the city to achieve them. As partners put it:

*The creation of trust in key decisionmakers and endorsement required there to be . . . (i) a measurable increase in the understanding of the reality of climate change, its potential economic and social consequences; (ii) increased acceptance that low carbon provides a route-way past or through these problems and is the correct response to them; and (iii) increased acceptance of the proposition that that low carbon strategies offered the opportunity to re-think and re-engineer a spatial area (Liverpool) and its economy and environs in positive and sustainable ways.*

Liverpool Vision, personal communication

Many problems remain (North 2010b) but the start has begun of a long route to a complex socio-economic transition from a carbon intensive to a low carbon society. Low Carbon Liverpool's work has opened up conversations and moved policy on. Given that the full extent of impact takes time to emerge, it is too soon to say what that might be over time.

KE worked as the research topic suited it, as the researchers knew and were happy to work with the partners, and as the researchers had skills to work in partnership that not all academics have (or want to deploy). This is not to deny the claims of those who see universities as sites for the development of human potential, for the cultivation of critical thinking on their own terms (Walton 2011), and of research on topics which they are curious about and excited by, that has no obvious impact of any kind – but which may be world changing later. It is not to negate conceptions of research as an exciting journey to an unknown, perhaps dangerous, location (Shaw 2011), as opposed to the instrumental solving of problems set by the powerful. But, equally, to concede the territory associated with KE in advance to those who only wish to focus in uncritical ways on policy issues set by the state or business, or those who see it as a one-way transmission of ideas from the academy to the world, is to miss the opportunity to do good, critical research in participatory ways, on issues that matter. The traditional routes set by the research councils, which are becoming harder and harder to access, are not the only ways forward.

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## **Notes**

1 Reference RES-185–31–0113.

2 See [www.lowcarbonliverpool.com](http://www.lowcarbonliverpool.com)

3 REF 2014 Assessment framework and guidance on submissions

4 The favoured few, of course, on REF panels, have the power to judge what is impact in wide, or more limited terms.

5 [www.esrc.ac.uk/collaboration/knowledge-exchange/](http://www.esrc.ac.uk/collaboration/knowledge-exchange/)

6 <http://ec.europa.eu/environment/europeangreencapital/>

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