**A Place for Climate in a time of Capitalist Crisis? A case study of low carbon urban policy making in Liverpool, England**

This paper draws upon regulationist perspectives to explore the rationales which inform low carbon economic development at the city level. This work is developed through a case study of low carbon policy making in Liverpool, UK.  The paper identifies conflict between those who argue for deeper engagement with the emerging low carbon policy domain, and others who remain committed to maintaining existing patterns of growth.  The paper argues that regulationist-inspired perspectives particularly help understand places where the transition to a low carbon economy can falter in the face of competing agendas such as reigniting growth and coping with austerity.

Keywords: Low Carbon, City Governance, Regulation Theory

1. **INTRODUCTION**

Increasingly, international efforts to respond to climate change are being seen as inadequate ([Hansen 2009](#_ENREF_41), [Anderson and Bows 2011](#_ENREF_3)) and sub-national responses (i.e. cities and regions) are emerging as, perhaps, a more appropriate platform for policy action ([Rutland and Aylett 2008](#_ENREF_103), [Rice 2010](#_ENREF_101), [Hodson and Marvin 2013](#_ENREF_47)). Yet while momentum is shifting to these sub-national efforts, at a strategic level progress has been underwhelming, creating a growing gap between rhetoric and the effectiveness of many urban responses that attempt to respond to climate change ([Bulkeley and Betsill 2013](#_ENREF_20)). Our understanding of why rhetoric has often not been met by concrete progress is lacking, as while there are studies of low carbon transition at a local level ([Bulkeley et al. 2011](#_ENREF_21), [Bulkeley 2013](#_ENREF_19)) there are fewer theorisations of how this transition interacts with processes of local economic development, especially in conditions of austerity ([Peck 2012](#_ENREF_90)). As a contribution to this debate, and developing upon the work of While et al (2010), While (2011), Jonas et al ([2011](#_ENREF_56)), and [McGuirk et al. (2014)](#_ENREF_70) who have begun to theorise how low carbon transitions are being governed within complex socio-technical and predominately neoliberal economic systems, this paper develops a regulationist-inspired approach to this agenda to consider how climate action is deployed by urban managers as they develop economic policy for their cities.

The paper examines how climate policy and economic development strategies for the city are constructed. In doing so, and for the first time, the paper considers if urban policy (and climate policy within it) represents a response to recent conditions of capitalist crisis and austerity, and which re-emphasises a commitment to elements of a mode of regulation that have been threatened since the onset of the 2008 financial crisis; or whether such policies represent the adoption, transition towards, or attempts at the transition towards, a new ‘low carbon’ mode of regulation which anticipates a future crisis caused by climate change. Rather than theorising the primary aim of low carbon economic policy as protecting society from ecological damage (While et al 2010), the paper advances a regulationist perspective which suggests that, as a result of capitalist crisis, from 2008 the potential of low carbon transitions to form a new accumulation strategy ([Vanolo 2014](#_ENREF_112)) which fundamentally revisits the growth strategies that developed in the late 20th century can stall and become supplementary to the accepted politics of urban entrepreneurialism ([Harvey 2001](#_ENREF_45)). Central to these discussions is the work of Jenson ([1990](#_ENREF_49), [1993](#_ENREF_50)) who argues that the role of actors – both in dominant and sub-ordinate roles – is key to how challenges to existing MORs and/or new MORs which may take their place can either take hold, or are rebuffed.

The explanatory potential of the paper's theoretical perspectives is discussed through the lens of low carbon policy making in Liverpool, UK. Low Carbon Liverpool was a project which explored how Liverpool’s economic development agencies could facilitate the development of a prosperous local economy which, nonetheless, avoids climate change ([North 2013](#_ENREF_77)). The project developed a detailed commentary on the low carbon policy making process as policy makers (i.e. the dominant and subordinate actors of Jenson) grappled with, and contested, emerging understandings of what the implications of climate change might mean for the city.

The paper develops its argument as follows: after introducing regulation theory as the basis for the conceptual framework, the paper explores how cities have utilised urban entrepreneurialism as a means to deliver continued economic growth, before introducing climate change as a significant challenge to the hegemony of such approaches. Then, utilising Liverpool as a case study, the paper considers how urban areas might incorporate climate change policy into their economic agendas. To conclude, the paper evaluates the extent to which climate policy has been incorporated within the entrepreneurial MOR during a period of crisis, and subsequently under conditions of austerity.

1. **CONCEPTUAL FRAMEWORK**

*2.1 Regulation Theory*

Developed as a means to understand a period of stable economic growth in the decades following WWII, and a subsequent period of turmoil following the oil shock of 1973 and changes brought about as a result of globalisation, Regulation Theory ([Aglietta 1979](#_ENREF_2), [Jessop 1992](#_ENREF_51), [Peck and Tickell 1992](#_ENREF_95), [Painter and Goodwin 1995](#_ENREF_83), [Goodwin and Painter 1996](#_ENREF_39)) conceptualises how the capitalist system reproduces itself and maintains prolonged periods of stability and growth over the medium-long term, despite an inherent tendency toward cyclical crisis.

In those periods where economic growth breaks down new processes of accumulation, known as Modes of Regulation (MOR) emerge, often constituted through new and distinctive social practices operating at a variety of scales ([Goodwin and Painter 1997](#_ENREF_40), [Jessop 2002](#_ENREF_54)).

‘The nation-state has been viewed as the central core of the structure of regulation’ for some time ([Collinge 1999 p562](#_ENREF_28)) - in part because of its political dominance and the ability to instigate regulatory structures (e.g. planning systems, tax regimes, economic policy etc.) which affect all who operate within it – such as regions and cities. Similarly, and as we will explore throughout this paper, nationally instigated macro-economic policies such as austerity ([Lowndes and Gardner 2016](#_ENREF_67)) can limit the fiscal flexibility of sub-national actors.

The extent to which the principles of regulation theory can be applied at the local scale is contested, reflecting variations in the range and extent of powers across national political systems. Given that some cities consistently outperform others, reflecting spatial differences in institutional composition and capacity, as well as different unevenly developed regulatory systems which overlap across space: they cannot be isolated ([Duncan and Goodwin, 1988](#_ENREF_28); Painter and Goodwin 1995). This means that it becomes increasingly difficult to identify distinctive local MORs which are not the result of overlapping hierarchical or horizontal systems ([Peck and Tickell 1992](#_ENREF_94), [Scharpf 1994](#_ENREF_105)). That said, the local is far from excluded as the site of regulatory activity, with [Brenner (2003)](#_ENREF_14) arguing that regulatory processes, once the domain of national geographies, are increasingly subject to a ‘Glocalization’ which targets ‘the local and regional scales as strategic sites for regulatory experimentation’ (p208). Here, and as we will argue shortly, entrepreneurial approaches ([Harvey 1989](#_ENREF_43)) represent one of the primary channels through which this goal has been pursued.

Over time, these MOR become accepted and ultimately adopted as part of the capitalist system itself. As a newly successful MOR becomes established, it tends towards hegemony over competing economic discourses ([Bristow 2010](#_ENREF_17)). Importantly, however, the presence of an established MOR should not be viewed as a permanent solution to the underlying tendency of capitalism toward regular crises, but merely a ‘temporal fix’ that either averts immediate crisis, or moves it to another place through attempts at a ‘spatial fix’ ([Harvey 1992](#_ENREF_44), [Goodwin and Painter 1996](#_ENREF_39)). As such, MORs require constant reconfiguration because, over time, they begin to adopt the same characteristics that made previous accumulation strategies predisposed to crisis ([Peck and Tickell 1992](#_ENREF_95)). Consequently, crisis periods often present the greatest opportunities to challenge hegemonic discourses, albeit often with the result of maintaining the prevailing capitalist power relations ([Jessop 2005](#_ENREF_55), [Bristow 2010](#_ENREF_17)).

In exploring how successful MORs are constructed, Jenson ([1990](#_ENREF_49), [1993](#_ENREF_50)) argues that the role of actors should not be overlooked as, whilst accumulation strategies are constituted through social practices, it is the actors within those institutional contexts that hold responsibility for policy making (Jenson, 1990). Reflecting arguments made by advocates of the Strategic Relational Approach ([Brenner et al. 2003](#_ENREF_16), [Brenner 2004](#_ENREF_15)), Jenson (1993) suggests that those actors can be grouped into communities who are dominant and subordinate, where the former limit the power of the latter. Importantly, the relationship between the two groups is dynamic ([Jenson 1990](#_ENREF_49)), and during periods of economic turbulence longstanding social relations become more permeable to innovations from subordinate groups. Such innovation often develops across four phases: (i) A naming process which grants recognition and legitimacy to an issue; (ii) establishing a shared identity, objectives, priorities and (iii) narrative that allows allies to join; and (iv) identifying and interpreting the existing political and institutional conditions to facilitate further action (Jenson: 1990, 1993). If a subordinate group is to successfully capitalise on such a window of opportunity, the linking of phases iii and iv is crucial and, specifically, they must incorporate dominant actors as allies. If this is not achieved, accessing existing (dominant) institutions as a subordinate group becomes problematic, and progress can stall ([Matthews 2012](#_ENREF_69)).

The principles discussed thus far are applicable to MOR more broadly. However when specifically deploying regulation theory to consider how a low carbon MOR might emerge at the local scale, we must also make further considerations. Alongside the avoidance of engaging in any local fallacy ([Brown and Purcell 2005](#_ENREF_18)), or attempting to cut the local off from other scales, we need to avoid what [Sayer (1989)](#_ENREF_104) characterises as binary ‘histories’, acknowledging the dangers of prematurely proclaiming a MOR a ‘success’ ([Peck and Tickell 1992](#_ENREF_95)) as rarely, if ever, is a MOR either perfectly formed, or completely absent ([Goodwin and Painter 1997](#_ENREF_40)). Instead, economies tend to transition between MOR which experience lesser or greater levels of coherence and longevity. Indeed, Painter and Goodwin (1995) argue that the concept of an MOR is inherently problematic as it implies finality, coherence and completion, whilst simultaneously underemphasizing the processes of economic development and policy making through which any coherence does emerge.

Thus, in this discussion we are not attempting to identify the emergence of a totally coherent low carbon MOR that can be generalised from. Rather, we attempt to understand how place can influence the ways in which low carbon is incorporated into any MOR and, given uneven development, how low carbon economic transitions may be faster and more developed in some places than in others. Here, and per Jenson (1990, 1993), we see attempts by urban actors to grapple with what the implications of climate change might be as a factor which can significantly influence how such an MOR might developed.

*2.2 – Urban Entrepreneurialism*

In policy terms, the late capitalist MOR manifests itself in the New Urban Politics ([Cox 1993](#_ENREF_31)) of ‘Urban Entrepreneurialism’ ([Hubbard and Hall 1998](#_ENREF_48), [Harvey 2001](#_ENREF_45)), emerging to become a predominant method of securing continued urban viability in an increasingly globalised market economy in which cities compete – regionally, nationally and internationally – for globally footloose capital and the growth that it brings ([Jessop 1997](#_ENREF_52), [1998](#_ENREF_53)). Acknowledging the post-fordist model of more flexible labour markets and the resulting lack of long-term economic stability, the entrepreneurial city seeks to deploy place-specific strategies ([Parkinson and Harding 1995](#_ENREF_87)) to make itself as attractive as possible to global businesses, with pressure to forego any policies or programmes, either social or environmental, that can be conceptualized as a ‘burden on business’ ([Peterson 1981](#_ENREF_99)). Consequently entrepreneurial cities market themselves as ‘business friendly’ places that celebrate ‘enterprise’ and ‘competitiveness’ ([Cochrane 2003](#_ENREF_27)).

The efficacy of these ‘competitiveness’ approaches is contested, with some ([Cox 1997](#_ENREF_29), [1998](#_ENREF_30), [Jessop 1998](#_ENREF_53)) arguing that their ubiquity renders such approaches meaningless in an environment where capital is often more locally embedded than others would suggest. To critics, the result is the production of vacuous, indistinguishable mission statements ([Lovering 1995](#_ENREF_66)) where, to gain an edge, conceptions of what constitutes ‘competitiveness’ are cast so widely that policies previously seen as making only a nominal contribution to economic growth, e.g. environmental agendas, are hi-jacked in its support ([Dannestram 2008](#_ENREF_32), [Raco 2008](#_ENREF_100), [Béal 2011](#_ENREF_4)). When addressed on its own terms, however, the entrepreneurial model is frequently seen as a success by urban policy makers, revitalizing city economies albeit often in sectors which are inaccessible to those who lost jobs in the immediate post-fordist downturn, often replacing full-time jobs with part-time work, and often overlooking poorer areas ([Boyle 1994](#_ENREF_13), [Beazley et al. 1997](#_ENREF_5)). Going further, such is its widespread use that competitiveness agendas have been described as a zero-sum game through which narrowly conceived narratives of ‘winners’ and ‘losers’ result in the marginalising (or worse) of unsuccessful cities or those who do not engage with the entrepreneurial agenda ([Peck and Tickell 1994](#_ENREF_96), [Bristow 2010](#_ENREF_17)), resulting in what Peck ([2014](#_ENREF_91)) describes as a ‘dull compulsion’ to participate.

Like any other settled MOR, the Urban Entrepreneurial model has faced a number of challenges to its legitimacy, arguably the severest of which being the 2008 financial crisis ([Gonzalez and Oosterlynck 2014](#_ENREF_38)). In response, the UK government was one of many that instigated austerity measures, primarily manifested through cuts to public spending. This, [Meegan et al. (2014)](#_ENREF_72) argued, made the re-ignition of urban growth a priority, particularly in cities with an entrenched reliance on public sector jobs. Consequently, what emerged was an 'austerity urbanism' ([Peck 2012](#_ENREF_90)) which saw cities re-engaging in entrepreneurial actions in order to secure future prosperity. Ultimately, this shift can be seen as an attempt to reinvigorate previously successful accumulation strategies, even when their limitations have been exposed.

Building upon this discussion, this paper considers how regulationist approaches can aid in understanding how and why city strategies deploy low carbon policy. To do this we need to understand how climate change has emerged as a potential crisis event that can challenge the settled MOR, and thus explore the extent to which conceptions of urban entrepreneurialism advanced by policymakers support, oppose, or skew local action to avoid its effects.

*2.2 The Environment as a New Crisis?*

Although traditional conceptions suggest that capitalist crises tend to have economic causes, in the aftermath of the energy crisis of the 1970s and the rise of the environmental movement, Lipietz ([1987](#_ENREF_62), [1992](#_ENREF_63)) was amongst the first to argue that environmental crises might entail a fundamental challenge to growth-based capitalism. Though this is an under-explored area of regulation theory, it is a view shared by others including While, Jonas and Gibbs, (2010). In recognition of this challenge environmental policies became an increasingly visible within post-fordist economies ([Lipietz 1987](#_ENREF_62), [Missbach 2000](#_ENREF_74)), although efforts to reduce greenhouse gas emissions were largely undertaken, and quantified at a national level. Increasingly, these international efforts are being seen as falling short ([Hansen 2009](#_ENREF_41), [Anderson and Bows 2011](#_ENREF_3)), and much like other rescaling of regulatory action ([Brenner 2003](#_ENREF_14)), sub-national responses (i.e. cities and regions) have emerged as a more productive policy domain ([Castan Broto and Bulkeley 2012](#_ENREF_24)).

Although the Nottingham Declaration ([2000](#_ENREF_61)) represented some of the UK’s first forays into an urban climate policy, it was the ‘Stern Review on the Economics of Climate Change’ ([Stern 2006](#_ENREF_107)) which significantly affected mainstream policy thinking. Stern argued that climate change represented 'the greatest and widest-ranging market failure ever seen’ (Stern, 2006 pi) and immediate action was necessary to countermand the economic damage climate change could bring. Echoing Lipietz ([1987](#_ENREF_62), [1992](#_ENREF_63)), it was those economic arguments which influenced the production of the UK Government’s Climate Change Act, committing the UK to an 80% reduction in its emissions by 2050 ([HM Government 2008](#_ENREF_46)). In practice, and perhaps foreshadowing [Hodson and Marvin (2013)](#_ENREF_47), the cities would take a key role in the delivery of this target, achieved through the monitoring of a suite of performance indicators ([Pearce and Cooper 2011](#_ENREF_88)).

Concerns around the legitimacy and efficacy of this normative environmental-economic agenda, however flawed, were deepened when, just as those efforts to mitigate the effects of climate change began to codify, the worst effects of the post-2008 financial crisis began to be felt. Consequently, what was conceptualised as a short-medium term problem that could be co-opted into an entrepreneurial MOR had the potential to be swept aside as economies grappled with a new immediacy: returning to accumulation. Despite this, debates about how these two competing outcomes can be reconciled continued, with emissions reduction in particular conceptualised as both a problem and an opportunity for most advanced market economies (While, Jonas and Gibbs, 2010).

Against this backdrop, in 2010 a Conservative-Liberal Democrat Coalition Government was elected in the UK. Although early speeches from the Prime Minister outlined ambitions for ‘the greenest government ever’ ([Cameron 2010](#_ENREF_22)), it became clear that a programme of austerity ostensibly to reduce national debt would take priority and, consequently, during the Coalition’s term government subsidies for green energy projects were reduced, or cut altogether ([While 2013](#_ENREF_114)). Therefore, while city-level responsibilities under the 2008 Climate Change Act remained in place, following the abolition of English regional governance in 2010, and a subsequent shift in emphasis towards city-regions ([Sturzaker and Nurse 2020](#_ENREF_108)), questions remained as to how the UK cities would develop climate responses. Accordingly, and in line with the entrepreneurial nature of city-level activity seen in other areas, a raft of differing responses emerged from emissions reduction to climate mitigation ([Bicknell et al. 2009](#_ENREF_7), [Carmin et al. 2012](#_ENREF_23), [Castan Broto and Bulkeley 2012](#_ENREF_24), [Rutherford 2013](#_ENREF_102)). Yet, at a strategic level progress has been underwhelming ([Castán Broto and Bulkeley 2013](#_ENREF_25)) with, Bulkeley and Betsill ([2013](#_ENREF_20)) identifying a growing gap between rhetoric and the extent and effectiveness of the response.

This activity is not without theorisation and, in this context, [Béal (2011)](#_ENREF_4) refines Peck and Tickell’s ([2002](#_ENREF_98)) earlier work on roll-back/roll-out neoliberalism. Contending that the solution to the greatest market failure ever seen (Stern, 2006) remains markets ([Friedman 2008](#_ENREF_35)), low carbon policy choices made through this rationale are guided by a strategic selectivity ([Jonas et al. 2004](#_ENREF_57)) whereby cities are attempting to develop policy that responds to climate legislation but doesn’t threaten economic progress ([While et al. 2004](#_ENREF_115)). Consequently, for critics, policy is shaped so as not to overtly criticise or contravene the productive system and is thus incorporated into predominantly neoliberal urban agendas ([Smith 2007](#_ENREF_106), [Béal 2011](#_ENREF_4)) resulting in environmental arguments being placed second to economic imperatives ([Owens and Cowell 2002](#_ENREF_82), [Krueger and Gibbs 2007](#_ENREF_60), [While et al. 2010](#_ENREF_116)).

Whilst these theorisations are helpful in understanding the processes of low carbon transitions, often they don't allow for the understanding of the motivations behind *why* urban managers choose to engage with these agendas in constructing low carbon economic development strategies for their cities, or otherwise. Consequently we ask: what is that post-2008 MOR, and how is it constructed? How might cities react during these periods of crisis, and what do they prioritise? And, finally how, if at all, are climate change agendas co-opted into this process? Here Jenson’s work (1990, 1993) is valuable.

**3 A Place for Climate Change Policy in a time of Capitalist Crisis?**

To understand what is prioritised when an MOR becomes unsettled, this paper advances a hypothesis which suggests that the rationales governing these processes could be grouped into two broad categories: regulatory action that is *reactive* and *proactive*. The two rationales can be explained thus:

*Reactive Re-regulation:* In this categorisation, significant regulatory activity occurs in the period following a crisis event, and can primarily be seen through (urban) policy makers tailoring their economic responses to directly deal, post-hoc, with the causes of the crisis. In line with classic conceptions of regulation theory, such action can take a variety of forms from a fundamental shift in the means of production, to responses which result in no fundamental recalibration of the nature of capital accumulation, but rather an entrenchment of previously successful models, as seen in responses to the post-2008 crisis ([Peck 2012](#_ENREF_90)). The latter occurs through what Peck et al. ([2009](#_ENREF_92)) describe as ‘churning’: a renewal of older ideas, rather than any significant change, stemming from the unstable and uncohesive nature of neoliberal growth strategies ([Peck et al. 2013](#_ENREF_93)). Consequently, what we often see is a minor shift in strategies, attempting to reignite previously successful accumulation strategies without any meaningful attempt to engage with the fundamental causes of crisis.

In this scenario, per [Owens and Cowell (2002)](#_ENREF_82), [Krueger and Gibbs (2007)](#_ENREF_60), [While et al. (2010)](#_ENREF_116), given austerity and stalled growth climate change can be displaced as a strategic priority and, perhaps, viewed in urban entrepreneurial terms as the 'burden on business'; the exception being when a low carbon sector is seen as a vehicle to reignite, and then expand, the city's economy in the post-crisis period. Here policy makers position their city to capitalize on the latest trends of growth delivery (e.g. low carbon technology) as a means to attract job, business and wealth creators into the city in order to reconnect with the previously successful MOR. Crucially, this is not the same as taking steps to avoid climate change by reducing emissions or resource consumption.

*Proactive Regulation*: In this categorisation, rather than merely reconfiguring problematic elements, or maintaining/re-affirming a commitment to accumulation strategies which are shown to be flawed, as seen in other neoliberal-driven economies ([Peck et al. 2009](#_ENREF_92), [2013](#_ENREF_93)), policy makers seek to introduce new themes which deliver growth that is sensitive to future disturbances. Per [Jessop (2005)](#_ENREF_55) and [Bristow (2010)](#_ENREF_17), the post-crisis period creates a window for critical reflection, where policy makers can not only ask where have previous strategies fallen short, but also where their city's economic future might lie, and how potential future crises may affect those ambitions. Importantly, this does not mean wholesale change, but rather affords an opportunity to identify future challenges and opportunities and take meaningful steps to meet them. In doing so, this addresses Adger et al’s ([2005](#_ENREF_1)) notions of ‘bouncing forward’, in that proactive policy making might deliver a secondary competitive advantage against rivals who did not act early and who must latterly instigate costly adaptation measures ([While 2011](#_ENREF_113)). In climate terms this might take a number of forms. It may involve the systematic integration of low carbon into every facet of economic activity. This might include focusing on new industries, or revisiting and revising approaches which may not be sustainable in the longer term. Elsewhere it might centre on resilience – either to climate-induced economic shock, or to weather events. In all cases, the approach would not represent a hijacking of other agendas ([Dannestram 2008](#_ENREF_32), [Raco 2008](#_ENREF_100), [Béal 2011](#_ENREF_4)) for place promotion ([Jonas et al. 2011](#_ENREF_56)), but rather genuine and wide-ranging attempts to anticipate future crisis.

This exploration of how cities react within a post-crisis period can help to understand two things. Firstly, it can attempt to identify the rationales of city managers in dealing with a crisis. Do they see this period of turmoil as an opportunity, or a threat? What are their strategies for returning to successful capitalist accumulation, and do they merely represent what has been described as neoliberal ‘churning’ ([Peck et al. 2009 p64](#_ENREF_92)), or an attempt to fundamentally and critically address any shortcomings? Secondly, it provides a platform to ask how seriously climate change debates might feature in urban economic models. Given that climate change is increasingly being viewed as a fundamental threat to capitalist accumulation ([Lipietz 1992](#_ENREF_63)), an assessment of whether cities are creating a new, more resilient MOR which responds to climate change can help to understand how these debates affect mainstream economic thinking.

Now, using a case study of Liverpool, UK, the paper will explore how cities develop economic policies during a period of crisis and how climate change debates feature in this process. The case study is developed using the long-term observation of Liverpool’s policy-making process including meetings, seminars and public events, through the Low Carbon Liverpool project ([North and Barker 2011](#_ENREF_78)), and subsequent post-hoc interviews with actors who were involved in Liverpool’s policy-making process throughout this period. The discussion draws upon those sources, alongside press coverage and documentary analysis, as a means to objectively interpret events.

**4. CONSTRUCTING LIVERPOOL’S LOW CARBON POLICY ENVIRONMENT**

*4.1 Liverpool: from Fordist Crisis to Financial Crisis*

To understand Liverpool and its post-2008 policy responses it is important to discuss the city’s recent history. Once a wealthy port city, in the 1970s and 1980s, the decimation of port employment served to critically undermine the city’s social and economic fabric ([Sykes et al. 2013](#_ENREF_109)). In the mid-1980s, alongside a campaign of resistance against centrally-imposed public spending cuts, in an effort to address the city’s problems the city’s Militant-influenced Labour council set a budget that did not balance spending with revenue, culminating in several councillors being disbarred from office ([Parkinson 1985](#_ENREF_85), [Frost and North 2013](#_ENREF_36)). In urban entrepreneurial terms this represented the ‘disciplining’ of a recalcitrant city and cemented a perception of a city in, perhaps, terminal decline, leading Liverpool to be dubbed ‘the city of lost opportunities’ as regeneration and investment opportunities passed it by throughout the late 1980s and 1990s ([Bianchini and Parkinson 1993](#_ENREF_6)).

For much of the next two decades Liverpool, supported by significant EU ‘Objective One’ funding ([Meegan 2003](#_ENREF_71)), underwent substantive physical regeneration, including the Liverpool One shopping centre and a new arena/convention centre on the banks of the River Mersey ([Biddulph 2011](#_ENREF_8)). This revitalisation was, for many, affirmed when Liverpool was designated European Capital of Culture for 2008, and an estimated 15 million tourists spent £800m in the city ([Garcia et al. 2010](#_ENREF_37)). Against this backdrop, Liverpool’s leaders exuded pride in the revitalisation of a city that had finally come to terms with the consensus thinking in local economic development, had embraced the entrepreneurial approach and, in doing so, began deploying culture and tourism to drive economic regeneration ([Meegan 2003](#_ENREF_71), [Jones and Wilks-Heeg 2004](#_ENREF_58), [Boland 2007](#_ENREF_10)).

It was during this period that climate change agendas became an increasing policy priority. Charged with delivering emissions reduction of 80% by 2050 though the Climate Change Act, Liverpool set about producing an emissions reduction strategy ([City of Liverpool 2009](#_ENREF_26)), delivered through the monitoring of performance-based targets ([Liverpool First 2008](#_ENREF_65)). Facing this challenge, the mood from actors across the city was confident as, in part owing to the deindustrialisation of the city’s port-related industries, the location of heavier-polluting industries outside Liverpool’s boundaries in Halton, Knowsley and Wirral, and indications that newer sectors (e.g. knowledge and tourism) were driving the city’s economy ([Mersey Partnership 2012](#_ENREF_73)), Liverpool’s emissions were below the national average ([City of Liverpool 2009](#_ENREF_26)) and the city remained on course to meet its climate obligations.

Yet, in 2008 the newly revitalised Liverpool was not immediately perceived to be a resilient creature. This reflected a revitalisation which was largely geographically focussed on the city centre and, reflecting concerns about the limits of culture-led regeneration ([Mooney 1999](#_ENREF_75), [MacLeod 2002](#_ENREF_68)), social exclusion rates remained a problem away from the newly prosperous city centre ([Boland 2010](#_ENREF_11)). Such concerns where underscored as Liverpool One officially opened in 2008 amidst the global financial crisis. This, coupled with major public spending cuts following the election of the Coalition Government in May 2010, led Liverpool’s leaders to ask if, without avoiding action, the newly-recovered city was likely to revisit the problems of the previous decades, with the Capital of Culture year, in hindsight, just a brief respite from continued decline?

The city’s policy response in the immediate aftermath of the crisis was to unveil a new economic strategy designed to capitalise on the year as Capital of Culture and the city's physical regeneration. The strategy, a classical urban boosterism ([Boyle 1997](#_ENREF_12)), took a four-pronged approach focusing on:

* *The visitor economy* – building on the reinvention of the city’s image.
* *The knowledge economy* – supporting R&D, innovation and skills agendas.
* *The Superport –* Centring on the Peel-owned ‘Superport’ plan bringing together the airport, docks and new logistics infrastructure.
* *The Low Carbon Economy* – developing environmental technology, whilst capitalising on the generation of offshore wind in Liverpool Bay

([TMP. 2009](#_ENREF_111)).

Reflecting the concerns of the New Urban Politics, Liverpool’s GVA performance remained a fixation for economic managers and success, or failure, would be measured on those terms ([Parkinson et al. 2016](#_ENREF_86)).

In 2012 Labour Mayor Joe Anderson was elected on a platform[[1]](#footnote-1) which maintained this ambition for Liverpool’s future: it would invest to grow more wealth – the entrepreneurial city encapsulated. The city centre remained the focus of regeneration, with plans for the waterfront to host new skyscrapers built by Peel as part of their Atlantic Gateway strategy ([Harrison 2013](#_ENREF_42)), the building of more convention space, and the hosting of an International Festival of Business (IFB) in 2014.

An examination of these approaches would suggest that the city's economic development managers remained committed to the forms of economic activity that had proven successful to Liverpool in the past, confident that they were sufficient to weather the post-2008 crisis. Whilst low carbon did feature prominently as one of the city’s four drivers, its inclusion was an attempt to capitalise on emerging industries to generate new jobs and businesses within the invest-to-grow paradigm, rather than a thematic keystone underpinning a new environmental outlook. ‘This is not about hair shirts’, those advocating for a different approach were told: “if low carbon doesn’t generate jobs and businesses [the city will] find a sector that will”. Beyond this, officers argued that emissions reduction efforts in line with the Climate Change Act did continue, albeit without fanfare. Strategically, broader environmental themes did feature, most notably through the city’s designation of a ‘Year of the Environment’ in 2009 as a follow-on to the Capital of Culture year, although with few major events to focus attention this largely failed to gain traction.

Thus, we would argue, early evidence of Liverpool’s immediate post-crisis economic strategies suggested a *reactive* response that re-emphasised those ingredients of previous economic success, whilst incorporating new factors - i.e. low carbon technology deployed specifically to bolster pre-existing growth models.

*4.2 A Time to Reflect?: Towards an Alternative Economic Vision*

In the period following the Stern Review ([2006](#_ENREF_107)), a number of lower-level economic development managers in the Chamber of Commerce, Liverpool Vision and the environmental charity Groundwork wanted to explore the extent to which the city had the right polices in place to secure the city’s future prosperity, but in a way that more overtly focused on climate change and sustainability. They coalesced around the ‘Low Carbon Liverpool’ (LCL) project, a knowledge exchange partnership between the University of Liverpool and these local partners, which identified a number of policies Liverpool could employ to improve its environmental performance ([North and Barker 2011](#_ENREF_78)). In its first major report ([North and Barker 2011](#_ENREF_78)), LCL argued that instead of treating the low carbon sector as a new, separate, economic growth area, the city should mainstream 'low carbon' into all of its economic drivers, i.e. seek to reduce emissions from economic activity in the city overall. To progress this agenda, LCL advocated the creation of a specific partnership body bringing together partners from across the public, private and community sectors in Liverpool, able to act as a challenger group ([Blanco 2015](#_ENREF_9)) to Liverpool’s accepted policy norms.

Now, as a means to examine how successful those advancing an alternative economic vision for the city were, the subsequent period of LCL activity, primarily occurring between 2011 and 2015, is discussed in line with Jenson’s (1990, 1993) work regarding the role of actors in formulating accumulation strategies.

*4.2.1 – (I) the Naming Process*

Immediately following the LCL report, Liverpool Green Partnership (LGP) was established in 2011 with the aim of advancing the report’s proposals, and to advocate for a more substantial environmental policy for Liverpool. Initially, membership of LGP consisted of the original LCL members, supported by similarly mid-level officers from Liverpool Primary Care Trust, and consultants ARUP. The establishing of LGP represented the first part of Jenson’s (1990, 1993) multi-stage policy innovation – i.e. a naming process that grants recognition of an issue and legitimacy to the task of devising solutions to it. LGP swiftly set about stages ii and iii (establishing a shared identity and narrative that allows allies to join). This narrative was founded on three central tenets – 1) That low carbon should be embedded within all of the city’s strategic economic drivers; 2) that strong and clear leadership drives successful cities (Kingdon, 1984); and 3) that a prospective bid for the ‘European Green Capital’ (EGC) award, as recommended in the LCL report, would serve as a means to advance any ambition and catalyse action.

The proposal for a potential EGC bid was deployed strategically as a means to appeal to the entrepreneurial tendencies of the city’s economic managers, for whom international events such as the European Capital of Culture and the 2014 IFB were a means of showcasing Liverpool’s global economic potential. To win EGC, cities must demonstrate strong performance across twelve criteria, acting as a benchmark of environmental best practice. Thus, engaging with the EGC criteria would allow areas of poor performance to be identified and (perhaps) addressed. In its nascent stages, LGP partners understood that the benefit of the EGC process was in identifying areas of strength and addressing poor performance, not necessarily making the bid itself – to say nothing of winning. This, LGP partners felt, could set the city on a path to a more sustainable set of policies, with the ‘cherry on the cake’ being winning the award itself. Therefore, with the support of Liverpool City Council, LGP commissioned ‘An Environmental Audit of Liverpool’ ([Nurse and North 2013](#_ENREF_80)) – a mock bid to explore how Liverpool fared against each EGC criteria – which would demonstrate the extent to which climate and sustainability agendas permeated the city’s activity, and identify areas of strong and weak performance.

*4.2.2 - (II) Establishing a Shared Identity and (III) Narrative*

Compiling the audit took six months, and proved successful in capturing the imagination of a wide range of policy makers across the city. Per Jenson’s (1990, 93) suggestion that the presence of a shared identity and coherent narrative would allow others to join, LGP’s membership swiftly grew. Early additions included MerseyTravel and Merseyside Waste and Recycling Authority, contributing significant data towards the audit, and adding legitimacy to LGP’s work. The Environment Agency became involved on similar grounds as the gatekeepers for a suite of environmental data including waste water and pollution. A number of groups joined LGP who, whilst not contributing to the audit (i.e. through providing data), nonetheless increased legitimacy in the eyes of key decision makers. This included representatives from the Diocese of Liverpool, and other Merseyside-based organisations including the Eldonian Housing Group.

Whilst LGP was successful in recruiting partners, it did not enjoy success in every case. In particular contrast to the Environment Agency, approaches to one major utilities provider were rebuffed, with their policymakers only seeking to work on more concrete (and explicitly endorsed) groupings. Similarly, the involvement of the city council was varied. LGP was consistently attended by mid-level officers in an observational and advisory capacity, providing updates on council activity, and what may, or may not, prove to be fruitful courses of action that would gain approval from the Mayor. For a period in late 2012, LGP also gained the endorsement of the elected Councillor with responsibility for climate change who attended, and latterly chaired LGP meetings and public events.

When published ([Nurse and North 2013](#_ENREF_80)), the results of the audit suggested that an EGC bid might be credible. The city performed well in areas of green space and public transport, although four areas of poor performance were identified: recycling rates, cycle lanes, green cars, and domestic water metering. Yet, despite the audit findings, and the broader EGC concept resonating with LGP’s growing membership of public, private and civil actors, efforts arguing for broader, more *proactive* economic policies that placed the city beyond the worst effects of climate change began to stall.

*4.2.3 – (IV) – Interpreting existing political/institutional conditions*

In early 2013, during a meeting hosted by the outgoing Bishop of Liverpool, a keen environmental campaigner in the UK’s House of Lords, attended by senior policy makers from across the city and designed to catalyse LGP’s behind-the-scenes action, in a surprise move Mayor Anderson announced the establishment of a high-level Mayoral Commission on the Environment to sit later the same year [2013]. This caught many, including informed actors, unaware and divided opinion. For some, including an officer from Liverpool City Council, it was characterised as a mayor who was unfamiliar with the agenda attempting to filter between "strong ... and sometimes competing agendas". Others provided a more critical reading, viewing it as a risk averse city council using ‘shadow powers’ ([Davies 2014](#_ENREF_33)) – i.e. its ability to create policy – in an attempt to regain control over an agenda that was gaining momentum beyond its control.

This debate was deepened following comments ahead of the Commission’s first sitting, as the Mayor gave an indication of how his definitions of sustainability differed from the common consensus, writing:

 *“When we talk about sustainability, people usually think of the environment and the future of the planet and all things green. But to me, sustainability simply means the ability to keep going … and that means providing the services this City and its people need. Because of [funding] cuts from this coalition government, we have some tough choices ahead...”*

(Mayor Joe Anderson, September 2013)[[2]](#footnote-2)

This gave a crucial insight into where the city’s priorities lay: deeply affected by austerity, and facing prolonged and stark budget cuts, Liverpool City Council found its hard won economic advantage once more at risk and was fighting to maintain it.

The establishment of the Mayoral Commission introduced an effective state of ‘purdah’, in which council officers refused to be drawn on policy which fell under the purview of the commission and began to distance themselves from LGP activity. During this time, Mayor Anderson also pricked other LGP policy ambitions – including rebuffing any potential EGC bid during remarks at a consultation event for the Mayoral Commission on grounds he believed Liverpool would not win nor be the first UK city to win the award – a view which proved correct following Bristol’s successful bid to become EGC for 2015. This effective halt to alternative environmental policy discourses lasted nearly two years, with the Commission’s final report delivered in June 2015 ([Liverpool City Council 2015](#_ENREF_64)). During this time, without a coherent binding narrative, LGP’s momentum faltered, its coalition began to fall away and, struggling to remain quorate, was put into abeyance.

For its part, when published, the Commission’s report did represent a shift towards more *proactive* policy making. Strategic action was encouraged, particularly at the then-emerging city-region level, and sustainability concepts were framed, not as vehicles to bolster existing growth, but as challenges the city must overcome to ensure long-term resilience. In doing so, the Commission recognised several shortfalls identified through LGP’s audit, including cycling and public transport infrastructure. Other ideas were rejected: EGC did not feature in any form, and whilst the Commission’s report advocated the role of alternate voices, the Mayor made clear that the City Council would lead activity and that, whilst welcoming the recommendations, any action would take place in the context of maintaining the city’s current economic state whilst dealing with centrally-imposed austerity.

*4.3 – The Post-Commission Environment*

In the intervening period, Liverpool and its wider city-region has continued to develop its economic policy. Arguably the most significant development during this time is the UK government’s plans for city-regional devolution ([Nurse 2015](#_ENREF_79)) which would, ultimately, lead to the election of a city-regional Mayor in 2017. Ahead of this, the city-regions leaders – comprising Liverpool and its 5 peripheral authorities - signed a ‘Devolution Deal’ in late 2015 ([DCLG 2015](#_ENREF_34)), focusing primarily on economic opportunities relating to the River Mersey. In doing so LCR reaffirmed its commitment to its four main economic drivers ([TMP. 2009](#_ENREF_111)).

At this point climate action in the city would diverge – reflecting tensions between the overlapping remits of the City Mayor and City-regional mayor ([Sturzaker and Nurse 2020](#_ENREF_108)). At the city level, there was evidence that Liverpool had not abandoned its entrepreneurial tendencies. In Mayoral elections in 2016 Anderson was returned to office and, in remarks following his victory the Mayor reaffirmed his belief that *economic* sustainability would be at the heart of the city’s future success, saying:

*"My vision is that we are sustainable in the future and not relying and dependent on government funding."*

Joe Anderson, May 2016[[3]](#footnote-3)

This approach was further evidenced through a bid to host the 2022 Commonwealth Games. This, argued the mayor, would serve as a ‘catalyst for regeneration’ ([Murphy 2016](#_ENREF_76)) driving Liverpool’s visitor economy along the same lines as previous events such as the Capital of Culture.

The City’s underpinning rationales have also been somewhat revealed following Britain’s vote to leave the European Union. Though Liverpool voted to remain ([Nurse and Sykes 2019](#_ENREF_81)), the mood in the city remains mixed. Ahead of the referendum some argued that the ‘knowledge’ economy amongst others could be critically undermined, whilst others argued that a shift away from the EU could, mirroring Liverpool’s earlier decline, open up new trade opportunities and prove a boon for the SuperPort. Regardless, in the immediate aftermath of the referendum it became clear that, if the 2008 crisis pushed low carbon from the top of the economic agenda, environmental debates were further isolated from the city’s post-Brexit narrative – suggesting that a *reactive* response which aims to maintain Liverpool’s economic revival at all costs will prevail once more.

Latterly, and following broader shifts in public opinion in 2019, Liverpool City Council was one of several councils in the UK to declare a ‘climate emergency’. In practical terms, this has resulted in the establishing of a cross-party select committee. However, this sits uneasily with other development projects in the city – including proposals to build a dual-carriageway road which will impinge on an area of reclaimed greenspace ([Thorp 2019](#_ENREF_110)).

At the City-region there is also progress. Moving beyond the core economic drivers, the new mayor, Steve Rotherham, has announced a wide-reaching Liverpool City Region Climate Partnership, accompanied by £500,000 of funding for climate-related projects. Although only weeks old at the time of writing, this has the hallmarks of a more proactive policy making and, in Jenson’s terms ([1990](#_ENREF_49), [1993](#_ENREF_50)) has the endorsement of those dominant groups which make success more likely to be realised.

**5. – Analysis**

Ultimately, in the aftermath of the 2008 crisis, an emerging if-normative environmental agenda was subsumed by an urban entrepreneurial-inspired boosterism where, for decision-makers, *reactive* forms of regulation that sought to reinforce Liverpool’s pre-crisis economic model took priority. Even against a backdrop of austerity, which undermined the city council’s ability to act strategically, the entrepreneurial MOR continued to deliver benefits to the city via the visitor economy, whilst Liverpool’s economic figures showed signs of improvement against competitors ([Parkinson et al. 2016](#_ENREF_86)). At the same time the city remained on course to fulfil its legislative climate change obligations which, given austerity, represented sufficient action on the city’s part in the view of senior policy makers.

Although challenges to this hegemony did occur, the success of attempts to instigate a *proactive* MOR which anticipated a future crisis were piecemeal and fragmented, and struggled to gain, and then keep, the attention of key decision makers. Instead, LGP found its own low carbon agenda as merely a competing discourse in a crowded, yet disjointed, policy environment. There are a number of reasons for the failure of a low carbon MOR to break through. Such agendas are heavily influenced by local conditions ([Jenson 1990](#_ENREF_49), [1993](#_ENREF_50), [Parés et al. 2014](#_ENREF_84)), and policy innovation is rarely the result of the persuasiveness of the arguments alone: politics matters. In line with arguments that the real generators of urban strategies remain local authorities ([Peck 1995](#_ENREF_89), [Peck and Tickell 1995](#_ENREF_97)), LGP activity was at one point described as ‘lobbying on steroids’ which had fallen short because it failed to secure;

 *“leadership at the top, I don’t think it’s the sort of thing you can keep trying to push up, somebody has to want to do it”*

(Liverpool City Council Officer, interviewed 2014)

The implication was that LGP had failed to convince those senior policy actors to shift from their economic consensus, and suggested that, although it had negotiated the earlier steps without major issue, LGP had not succeeded with part iv of Jenson’s criteria: identifying and interpreting the existing political and institutional conditions to allow further action ([Jenson 1990](#_ENREF_49), [1993](#_ENREF_50)).

**6. Conclusions**

A regulation theory-inspired analysis which focuses on the roles of dominant and subordinate actors can help to explain the uneven development of climate change responses at the urban level. In particular, and drawing upon the work of ([1990](#_ENREF_49), [1993](#_ENREF_50)) it helps to understand why discourses that stray from accepted economic narratives can be marginalised. An analysis of low carbon policy making in Liverpool provides an opportunity to explore how climate change connects with local economic development in a city that is not at the policy cutting-edge but rather, has embraced urban entrepreneurialism to drive an economic revival over several decades.

By suggesting towards regulation that is either *reactive* or *proactive*, it is possible to explore the motives and rationales behind economic development strategies, and to explore what happens when a preeminent MOR breaks down. Through this analysis it became clear that, in the case of Liverpool, low carbon economic activity formed an arm of a *reactive* response which sought the most viable vehicle to secure continued economic prosperity – in this case: bolstering the entrepreneurial thesis whereby low carbon sectors are viewed no differently to any other ([Jessop 1997](#_ENREF_52), [1998](#_ENREF_53)).

That is not to say that *proactive* policy making did not occur in the city. Yet analysis suggests that, in a city attempting to lockdown a new-found, but spatially limited prosperity, politics matters. Although those advancing a climate-focused agenda for the city did experience some success, the failure to adequately identify and interpret the city’s policy conditions as a means to drive further action, alongside the consequences of austerity limited this progress.

The failure to convince Liverpool’s policy elites, from whom all decisions ultimately flow ([Kingdon 1984](#_ENREF_59)), meant that the post-crisis window during which a failed MOR can be challenged ([Jessop 2005](#_ENREF_55), [Bristow 2010](#_ENREF_17)) closed without meaningful change. Thus *reactive* tendencies remain dominant as Liverpool tries to reinforce its hard-won success in the face of what it views as more pressing external challenges. Here, whilst *proactive* policy making can be observed, and project-level work continues, the failure of those actors to successfully engage the city’s policy making elite has low carbon has, thus far, not succeeded in reaching the mainstream of strategic policy making.

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1. <http://liverpool.gov.uk/mayor/pledges/> (accessed 26.04.16) [↑](#footnote-ref-1)
2. <http://liverpoolmayorjoeblogs.wordpress.com/2013/09/09/making-our-city-sustainable/> (Accessed 23rd May 2016) [↑](#footnote-ref-2)
3. <http://www.bbc.co.uk/news/election-2016-36203313> (Accessed 23.05.16) [↑](#footnote-ref-3)