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Climate action, city regions and central government: a comparative analysis of the UK City Deals

Working paper

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Abstract

This CREDS working paper aims to identify and understand diversity in sub-national ambitions on climate action across the UK. Comparative analysis between sub-national governments helps to provide insights into the drivers and mechanisms by which geographically bounded institutions and actors, including partnerships between Local Authorities, Local Enterprise Partnerships (LEPs), and the Private Sector, may manage to innovate and pursue climate action ambitions at local and regional scales – even if the central government is less ambitious in that respect. Empirically we undertake a desk study that analyses existing documentation on the City Deals, a UK government initiative which was co-developed with local and regional institutions and actors that (at least partially) expressed particular sub-national visions and ambitions. We focus on the City Deals initiative because it provides a suitable basis for comparative analysis in that central government had a set approach to striking these 'deals' but left room for local and regional institutions and actors to negotiate distinctive plans for their respective areas.

The working paper is published on-line as three separate documents; this is the main report, which is complemented by the Executive Summary and the Annexes. We strongly welcome constructive feedback, scrutiny and further discussion on these matters at this crucial time when climate action needs to be accelerated at the national and local level.

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1. Introduction

Because the Earth's administrative geography is splintered, addressing global environmental problems requires strong collective action between the nation states where most of these environmental problems are produced. International agreements to address climate breakdown (e.g. the 1992 Kyoto Protocol, the 2015 Paris Agreement), need to be followed up by national action. In the UK this commitment to national action has resulted in the Climate Change Act (2008) which legally binds the Secretary of State in ensuring 100% reduction of net carbon emissions from the 1990 baseline level by 2050 (UK Government, 2019a). But whilst central government can create legislation and set targets, is the role of devolved and local governments simply to deliver their fair share of the national target?

In the UK, research suggests that progress concerning the imperative of climate action is too slow, with the government's own advisors criticising the inadequate headway made by successive governments in Westminster (CCC, 2020; CCC, 2017; CCC, 2015). In the face of this deficiency, attention is increasingly turning to sub-national institutions and actors, particularly Local Authorities, and the role(s) that they may be able to play in innovating and pursuing climate action even if the Central Government is less ambitious in that respect (Local Government Association, 2021).

By the end of 2020, 319 out of 404 local governments and eight combined authorities had declared a Climate Emergency (Howarth *et al.* 2021), demonstrating (at least in discourse) their commitment to driving climate action locally (Climate Emergency, 2021). With these developments in mind, *identifying* and, more importantly, *understanding* diversity in sub-national actions, ambitions, and strategies, could provide valuable insights concerning the drivers and mechanisms at play in stimulating climate action at local and regional scales. Considering this broader objective, this working paper focuses on the City Deals initiative as a source of empirical material, offering a suitable basis for comparative analysis. While Central Government had a set approach to justifying and establishing City-Deals, it was up to participating institutions and actors to develop distinctive plans for their respective areas, within the envelope permitted (UK Government, 2013).

The working paper starts from the assumption that there are many factors and variables which could lead to diversity in the expression of regional and sub-national environmental ambitions. Variability in policy responses may arise from a broader suite of sub-national development priorities of City Regions: for example, there may be a nexus between climate action and housing which results in an ambition for low-carbon homes.

Alternatively, divergence may take on a temporal form: for example, the year that certain strategies/proposals were published. Or it could take a geographical form: for example the population of a region, the size of its economy or the number of participating local authorities negotiating an individual City Deal. Furthermore, it is likely that local and/or regional endowments: for example, access to information, resources and expertise could influence climate action ambitions and subsequent actions. In moving beyond these broad assumptions the paper seeks not only to *identify* diversity but also to develop an *understanding* regarding why this variation might occur, and the drivers and mechanisms employed to progress local climate action.

2. The City Deals

First developed under the Conservative and Liberal Democrat Coalition Government (2010–2015) and utilised by successive Governments since, City Deals are ostensibly designed to enable increased local participation in decision-making which affects local and/or regional development (UK Government, 2013). This agenda stems from an increasing recognition of the need to move away from a one size fits all approach to sub-national development and towards tailored initiatives which are able to account for, and leverage, the individuality of places (Localism Act, 2011; Unlocking Growth in Cities, 2011). The notion of a Deal, negotiated between the state and various local institutions and actors (including local authorities who are in many cases joined by LEPs and/or private sector actors), is the mechanism favoured since 2010 to drive forward this agenda. In regions outside of England, relevant National Governments or Executives are also part of the negotiation process.

To date, 35 deals have been developed. The first 8 deals, made up of English Core Cities, were completed in the 2012 in what was dubbed the 1st wave, with another 18 English City Regions sealing deals in the 2014 2nd wave. In addition to English regions, 6 deals have been struck in Scotland (2014 – 2020), with a further 2 in Wales (Cardiff; Swansea) and 1 in Northern Ireland (Belfast).

According to UK Government (2013), the deals: “give the city and its surrounding area certain powers and freedom to:

- take charge and responsibility of decisions that affect their area
- do what they think is best to help businesses grow
- create economic growth
- decide how public money should be spent.”

These powers and freedoms can be understood as the envelope within which local institutions and actors were able to negotiate their own plans.

There are several reasons why City Deals constitute a meaningful source of empirical data from which the aims of this paper can be addressed. Firstly, by granting greater powers and freedoms to institutions responsible for particular geographical areas, the City Deals enabled (to a certain extent) the prioritisation of local and/or regional ambitions which potentially diverge from those of the central government and other sub-national territories. Furthermore, the standardised format of the agreements lends itself to comparative analysis which, as an analytical tool for identifying and understanding diversity, is well suited to facilitate the development of fruitful insights relevant to addressing the aims of this research.

Aim 1: Identify diversity in sub-national ambitions on climate action across the UK

Aim 2: Seek to understand the variation observed

It is also worth noting that the underlying principle of the City Deal negotiating process – that is a deal signed-off by the state – as well as the scale of governance which the deals utilise have both been favoured by successive UK Governments and, despite scepticism over the motivations for adopting this approach to devolution (Hool and Hinks, 2020; O'Brien and Pike, 2019), there is little evidence to suggest that this strategy will be abandoned anytime soon (e.g. Towns Fund, UK Government 2019c). By exploring this form of policy instrument and scale of governance, then, insights may be identified which shine a light on the effectiveness of such approaches, including the extent to which negotiated deals enable or limit the ability of sub-national institutions and actors to drive forward their own local climate action ambitions.

3 Methodology

We carried out a desk study of existing City Deal documentation for all of the 35 Deals. The documents have a largely standardised format, which greatly facilitates comparative analysis. In order to address Aim 1, i.e. *identifying* diversity in sub-national ambitions on climate action across the UK, we could have decided to ignore all other thematic priorities within the Deals. However we felt that it was useful to be able to see where climate action sits within a wider landscape of policy priorities. Hence we undertook a thematic analysis of the 35 texts to identify the thematic priorities most prominent throughout the deals; the defining characteristics of the identified themes are detailed in Appendix 1. This analysis was largely inductive and driven by the data, as opposed to being informed by pre-existing literature or assumptions.¹ The priorities of City Regions were readily discernible within the data, with the City Deal texts detailing the development plans negotiated between the central state and sub-national actors for each City Region.

¹ Subsequently, the identified priorities are those most prominent throughout the agreements and not biased towards carbon emission reductions or any other pre-determined themes. Climate change adaptation constitutes the only exception in this regard; this theme was included in analysis by researchers despite the fact that it was not identified as a prominent theme.

Variation was identified by scoring the significance that each of the 35 City Deals placed on each of the identified themes on a scale from 0 to 4; 0 indicating no reference and 4 indicating Fundamental to the deal. These scores were then used to populate a heat map which visualises the findings (see results section, Table 1).

Further details regarding the calculations used to rank and sequence the themes are provided in Appendix 4.

In order to address Aim 2, i.e. seeking to understand why variation in climate ambitions exists between the Deals, we undertook two separate investigations. For the first investigation, we collected some key characteristics of the city regions involved and used this to classify the 35 city region deals. We subsequently examined the extent to which these new classifications coincided with particular thematic priorities (identified earlier; see above). Speculatively, we looked at the following key characteristics; timing of the city deals and their national administration (England, Scotland, Wales or Northern Ireland), the population size of the city region, the size of the regional economy and the number of local authorities participating in each city deal. The comparison between city deal classes and thematic priorities was carried out through a combined qualitative and quantitative approach that is detailed in Appendix 4. The findings are summarised visually in Tables 2-6.

We considered several other key characteristics but decided not to include these because of practical difficulties in constructing a relatively straight-forward and intuitive classification. For example, we were interested to know if the thematic priorities somehow reflected the political make-up of the local governments involved, but it was difficult to devise a simple and meaningful classification when there are multiple local authorities in each city deal and political representations change over time due to shifting election results and changes in political coalitions.

For the second investigation to address Aim 2, we undertook more detailed textual analysis of the Deals, to understand how planned climate actions were narrated or justified. This was achieved through a close-reading and subsequent thematic analysis of deals wherein climate action was ranked as either fundamental (4), important (3), or featured (2). The findings were then used to populate a table (Table 7) to visually illustrate the key recurring factors in the text of those City Deals that embraced climate action. Further details regarding the data gathered through the close-reading process are provided in the Appendix 5.

4 Results

Analysis of the City Deals documentation resulted in the recognition of eight high-level themes which were prominent across the data set. These themes, which are visually presented in the heat map in Table 1, represent the ambitions of the 35 City Regions who participated in the City Deals process. The most prominent theme – **Growth, finance, investment, and trade** – appears at the far left-hand side of the heat map, whilst the least prominent theme – **Climate change adaptation** – appears at the far right-hand side of the heat map.

4.1 Heat map of thematic priorities

As Table 1 shows, the theme **Growth, finance, investment and trade** constitutes the most prominently featured ambition from across the City Deals documentation. This was scored as either fundamental (4) or important (3) to the strategies of all city regions. Similarly, **People and skills** constitutes the second most prioritised ambition for regions. For all but six of the City Deals, this was scored as either fundamental (4) or important (3) to the strategy. It should be noted that the two aforementioned themes are the most prominent across the City Deals data set by a significant margin.

Next is **Science and innovation**, which was scored as fundamental or important for 20 City Deals. Following closely behind is **Transport** which was identified across the majority of Deals and recognised as fundamental or important in 18 city regions.

Slightly less prominent were the themes of **Housing** and **Climate change mitigation**. Both of these themes were fundamental or important for 11 regions, but Housing was more frequently found to be fundamental and less frequently ignored (i.e. no reference) than Climate change mitigation.

Finally, **Culture and tourism** and **Climate change adaptation** were the least commonly identified ambitions. Culture and Tourism was recognised as fundamental or important in six City Deals whilst Climate change adaptation was recognised as fundamental or important in only the Greater Brighton City Deal.

Table 1: Heat map illustrating the prominence of themes found in the 35 City Deal documents. The eight themes have been ranked left to right, from most prominent (dark green) to least prominent (light green) – each region is hyperlinked to relevant online documentation.

City Deal	Year	Growth, finance, investment & trade	People and skills	Science & innovation	Transport	Housing	Climate change mitigation	Culture & tourism	Climate change adaptation
Bristol City Region	2012	4	3	1	2	2	0	0	0
Greater Birmingham	2012	4	4	1	1	2	4	0	0
Greater Manchester	2012	4	4	1	4	4	4	0	1
Leeds City Region	2012	4	4	0	4	2	3	0	0
Liverpool City Region	2012	4	4	2	2	1	3	2	0
Newcastle	2012	4	4	1	2	2	4	0	0
Nottingham	2012	4	4	2	2	0	3	0	0
Sheffield City Region	2012	4	4	2	2	1	2	0	0
Black Country	2014	4	4	1	1	2	0	1	0
Greater Brighton	2014	4	2	4	2	2	2	0	3
Greater Cambridge	2014	4	3	2	4	4	2	0	0
Coventry and Warwickshire	2014	4	4	2	1	1	0	0	0
Hull & Humber	2014	4	4	1	1	0	2	0	0
Greater Ipswich	2014	4	4	2	0	0	0	0	0
Leicester & Leicestershire	2014	4	4	2	0	1	0	0	0
Greater Norwich	2014	4	0	2	4	4	0	0	0
Oxford & Oxfordshire	2014	2	2	4	2	2	0	0	0

Prominence in city deal documentation:

- 0 No reference
- 1 Passing reference
- 2 Featured more than once
- 3 Important to strategy
- 4 Fundamental to strategy

City Deal	Year	Growth, finance, investment & trade	People and skills	Science & innovation	Transport	Housing	Climate change mitigation	Culture & tourism	Climate change adaptation
Plymouth and the SW Peninsula	2014	4	4	2	0	1	2	0	0
Preston, South Ribble & Lancashire	2014	4	0	0	4	4	0	0	0
Southampton & Portsmouth	2014	4	4	1	0	2	0	2	0
Southend-On-Sea	2014	4	2	4	1	1	0	2	0
Stoke-On-Trent & Staffordshire	2014	4	4	2	0	1	4	0	0
Sunderland and South Tyneside	2014	4	4	0	2	0	0	0	0
Swindon & Wiltshire	2014	4	4	2	0	1	0	0	0
Tees Valley	2014	3	3	4	1	0	4	0	0
Thames Valley Berkshire	2014	3	4	2	0	0	0	0	0
Aberdeen City Region	2016	4	2	4	4	0	0	0	0
Inverness & Highland	2016	3	4	4	2	4	2	3	0
Edinburgh & South East Scotland	2018	4	3	4	2	4	2	3	0
Glasgow & Clyde Valley	2014	4	4	4	4	1	0	0	0
Stirling & Clackmannanshire	2020	4	3	4	2	2	3	3	0
Tay Cities Region	2020	4	3	4	2	2	3	3	0
Cardiff Capital Region	2016	4	3	2	4	2	2	1	0
Swansea Bay City Region	2017	4	2	4	0	2	3	1	0
Belfast City Region	2019	4	3	4	2	0	0	3	0

Prominence in city deal documentation:

- 0 No reference
- 1 Passing reference
- 2 Featured more than once
- 3 Important to strategy
- 4 Fundamental to strategy

4.2 Variation between deals

Upon a more detailed inspection, results suggest that there is variation between the priorities present between 1st wave, 2nd wave, Scotland, Wales and Northern Ireland deals. Notably, 1st wave deals were more likely to engage with the themes of Climate change mitigation, whilst 2nd wave deals were much more likely to engage with the theme of Science & innovation. Meanwhile, in the Scotland deals, the theme of Science & innovation was the most prioritised ambition, whilst People & skills featured less significantly than is observable through the overall dataset. With regards to the two Wales deals, both Science & innovation and Climate change mitigation feature strongly, whilst People & skills are less prioritised. Finally, in the one Northern Ireland deal (Belfast City Region), Science & innovation, People & skills, and Culture & tourism were identified as strong ambitions whereas Climate change mitigation features much less prominently than is observable overall. This variation of priorities between 1st wave, 2nd wave, Scotland, Wales and Northern Ireland deals is presented in Table 2.

Table 2: Variation of priorities between deals categorised through wave or country. Arrows indicate comparison with overall (higher is green, lower is red, similar is black).

Overall (all 35 Deals)		1st Wave (8 deals)		2nd Wave (18 deals)		Scotland (6 deals)		Wales (2 deals)		Northern Ireland (1 deals)	
Theme	Rank		Rank		Rank		Rank		Rank		Rank
Growth, finance, investment & trade	1	↔	1	↔	1	↓	2	↔	1	↔	1
People & skills	2	↔	2	↔	2	↓	4	↓	4	↓	3
Science & innovation	3	↓	6	↔	3	↑	1	↑	2	↑	2
Transport	4	↔	4	↓	5	↑	3	↓	5	↓	5
Housing	5	↔	5	↑	4	↔	5	↓	6	↓	6
Climate change mitigation	6	↑	3	↔	6	↓	7	↑	3	↓	7
Culture & tourism	7	↔	7	↔	7	↑	6	↔	7	↑	4
Climate change adaptation	8	↔	8	↔	8	↔	8	↔	8	↔	8

With regards to the timing that City Deals were published, some divergence is again observable.² Analysis suggests that deals published from 2015 onwards are more likely to prioritise Science & innovation than earlier deals (especially 1st wave), whilst deals from 2018 onwards are more likely to prioritise Culture & tourism than earlier deals. See Table 3 for more details.

Table 3: Variation of priorities between deals categorised through year of publishing. Arrows indicate comparison with overall (higher is green, lower is red, similar is black).

Overall (all 35 Deals)		2012 (8 regions)		2014 (19 regions)		2015–2017 (4 regions)		2018–2020 (4 regions)	
Theme	Rank		Rank		Rank		Rank		Rank
Growth, finance, investment & trade	1	↔	1	↔	1	↔	1	↔	1
People & skills	2	↔	2	↔	2	↓	4	↓	3
Science & innovation	3	↓	6	↔	3	↑	2	↑	2
Transport	4	↔	4	↓	5	↑	3	↓	5
Housing	5	↔	5	↑	4	↔	5	↓	7
Climate change mitigation	6	↑	3	↔	6	↔	6	↔	6
Culture & tourism	7	↔	7	↔	7	↔	7	↑	4
Climate change adaptation	8	↔	8	↔	8	↔	8	↔	8

² Variation in deals published in 2012 (1st wave) and 2014 (2nd wave plus Glasgow Region) are discussed above and will not be repeated here.

4.3 Associations between regional characteristics and thematic City Deal priorities

Several regional factors might be associated with particular thematic City Deal priorities, including: the population size of the region; the regional Gross Value Added (GVA); and the number of participating local authorities within each City Deal.

Growth & finance and People & skills were overwhelmingly dominant regardless of regional population size. However, analysis suggests that regions with more than 2 million residents – i.e. the regions with the largest populations – could be more likely to prioritise Climate change mitigation ambitions and less likely to prioritise Science & innovation than city regions with a smaller population. Regions with more than 1.5 million residents were also more likely to prioritise Climate change mitigation than less populous regions. See Table 4 for more details.

Table 4: Variation of thematic priorities by population size of the City Deal regions. Arrows indicate comparison with overall (higher is green, lower is red, similar is black).

Overall (all 35 Deals)	<500,000 (6 regions)	500,000– 999,999 (13 regions)	1,000,000– 1,499,999 (9 regions)	1,500,000– 2,000,000 (3 regions)	>2,000,000 (4 regions)						
Theme	Rank	Rank	Rank	Rank	Rank						
Growth, finance, investment & trade	1	↔	1	↔	1	↔	1	↔	1	↔	1
People & skills	2	↓	3	↔	2	↔	2	↔	2	↔	2
Science & innovation	3	↑	2	↔	3	↔	3	↓	4	↓	6
Transport	4	↔	4	↔	4	↓	5	↑	3	↓	5
Housing	5	↔	5	↓	6	↑	4	↓	6	↑	4
Climate change mitigation	6	↓	7	↑	5	↓	7	↑	5	↑	3
Culture & tourism	7	↑	6	↔	7	↑	6	↔	7	↓	8
Climate change adaptation	8	↔	8	↔	8	↔	8	↔	8	↑	7

Concerning the influence of GVA on priorities, Growth & finance and People & skills are again overwhelmingly dominant regardless of this factor; however, there is tentative evidence to suggest that the higher the GVA of a region, then more significance tends to be placed on Climate change mitigation ambitions. See Table 5 for more details.

Table 5: Variation of thematic priorities by GVA of the City Deal regions. Arrows indicate comparison with overall (higher is green, lower is red, similar is black).

Theme	Overall (all 35 Deals)		<£10 billion GVA (7 regions)		£10–£20 billion GVA (14 regions)		£20–£30 billion GVA (7 regions)		£30–£40 billion GVA (4 regions)		>£40 billion GVA (3 regions)	
	Rank		Rank		Rank		Rank		Rank		Rank	
Growth, finance, investment & trade	1	↔	1	↔	1	↔	1	↔	1	↔	1	↔
People & skills	2	↔	2	↔	2	↔	2	↔	2	↔	2	↔
Science & innovation	3	↔	3	↔	3	↓	4	↔	3	↓	6	↓
Transport	4	↔	4	↓	5	↑	3	↓	6	↑	3	↑
Housing	5	↔	5	↓	6	↔	5	↑	4	↔	5	↔
Climate change mitigation	6	↓	7	↑	4	↓	7	↑	5	↑	4	↑
Culture & tourism	7	↑	6	↔	7	↑	6	↔	7	↓	8	↓
Climate change adaptation	8	↔	8	↔	8	↔	8	↔	8	↑	7	↑

With regards to the influence of the number of participating authorities on priorities, the results suggest that this variable has little impact upon ambitions. Although slight variation is observable – for example Climate change mitigation being prioritised slightly more than Housing and vice versa – ambitions largely reflect those observable from the data set as a whole. See Table 6 for more details.

Table 6: Variation of thematic priorities by number of participating authorities within each City Deal. Arrows indicate comparison with overall (higher is green, lower is red, similar is black).

Overall (all 35 Deals)		4 or less participating authorities (19 Regions)		5 or more participating authorities (16 Regions)	
Theme	Rank		Rank		Rank
Growth, finance, investment & trade	1	↔	1	↔	1
People & skills	2	↔	2	↔	2
Science & innovation	3	↔	3	↔	3
Transport	4	↔	4	↔	4
Housing	5	↔	5	↓	6
Climate change mitigation	6	↔	6	↑	5
Culture & tourism	7	↔	7	↔	7
Climate change adaptation	8	↔	8	↔	8

4.4 Climate action oriented ambitions

As stated earlier, the aim of this research is to identify and understand diversity in sub-national ambitions on climate action across the UK. This includes an interest in all forms of climate action, including those related to energy generation, new housing development and energy efficiency retrofit, as well as high-emitting sectors like transport.

Climate change mitigation was identified across a significant number of deals (19 out of 35) and recognised as fundamental or important for 11 regions.

For a number of regions, Climate change mitigation ambitions consisted of running low-carbon pilot programmes. For example, Stoke-on-Trent and Staffordshire declared their desire to roll-out both a District Heating Network and a Smart Energy Network ([page 2](#)), whilst Nottingham declared a desire to acquire additional funding to expand their city's Heat Network ([page 3](#)). The Liverpool City Region Deal also included a low-carbon pilot, but unlike the two aforementioned programmes which both involve physical infrastructure, Liverpool's pilot hopes to cut red tape and make it easier for companies to invest in offshore wind infrastructure ([page 3](#)). Meanwhile, in the Tees Valley City Deal, ambitions centred around a pre-FEED study to identify and develop a business case for investment in industrial Carbon Capture and Storage (CCS), along with technical studies and business cases associated with the roll-out of two waste industrial Heat Networks ([page 4](#)).

In several deals, Climate change mitigation ambitions centred around energy efficient homes and public buildings (e.g. Birmingham and Swansea). In the Greater Birmingham deal, energy efficiency is focused on retrofit programmes ([page 5](#)), whilst in the Swansea deal energy efficiency is linked to sustainable development of new-housing as well as retrofit opportunities ([page 13](#)). Similar to Swansea, the Cardiff Capital Region City Deal (although not prioritising Climate change mitigation ambitions) is concerned with establishing the delivery of renewable energy-led regeneration and housing programmes to ensure "the principles of clean-tech are anchored within physical development initiatives" ([page 15](#)).

As well as low-carbon pilots and infrastructure projects, some regions also confirmed emissions reductions programmes or action plans including Greater Manchester ([page 4](#)) and Tees Valley ([page 6](#)). In the Leeds City Region Deal, ambitions centred around the development of a portfolio for renewable energy and retrofit investment opportunities ([page 4](#)). Meanwhile, the Tay Cities Region state ambitions to develop a Living Lab for Eco-Innovation and Business Eco-Innovation ([page 45](#)).

The City Deals documentation also revealed that certain regions are keen to leverage their geographical proximity to marine environments, with Newcastle ([page 3](#)), Swansea ([page 8](#)) and Liverpool ([page 8](#)) all keen to develop and exploit low-carbon marine and/or offshore engineering sectors. Likewise, despite not prioritising Climate change mitigation ambitions, the Plymouth Region also cited the development of the marine renewables sector as an ambition (through a programme to provide infrastructure and industrial space for the sector; [page 2](#)).

Less frequently cited but still observable, several regions made clear their ambitions for low-carbon transport, most notably Stirling ([page 5](#)) and Tay Cities ([page 30](#)). In the Stirling deal, this includes plans for active travel routes through the Walk Cycle Live Stirling initiative ([page 5](#)). Similarly, despite not prioritising Climate change mitigation ambitions, the Greater Cambridge City Deal transport strategy explicitly "supports carbon objectives and promotes high quality of life for local communities by minimising the environmental impact of transport whilst promoting the ability for the area to grow" ([page 5](#)).

4.5 Climate change mitigation and housing

As the results demonstrate, carbon emissions reductions for new housing developments was not recognised as a high-level priority. However, both Climate change mitigation and Housing were identified as independent priorities.

For four City Deals, Birmingham, Greater Manchester, Newcastle and Swansea, both Climate change mitigation and Housing were deemed as fundamental or important to the local strategy. However, prioritising both Climate change mitigation and Housing does not necessarily seem to imply *low-carbon new housing*. In the Greater Birmingham deal for example, despite details regarding a retrofit programme to improve the efficiency of existing housing stock, the agreement suggests that *new housing* is seen as a means to stimulate economic development as opposed to driving carbon emission reductions ([page 17](#)).

If we look at the Greater Manchester agreement we see a similar story. Despite prioritising Climate change mitigation and Housing individually, there seems to be a disconnect when it comes to bringing the two together to drive carbon emission reductions in new housing development.

Instead, emphasis regarding Housing is placed on numbers (between 5,000 to 7,000) as opposed to quality ([page 21](#)). With regards to housing in the Newcastle deal, £25 million is earmarked to be invested in a Future Homes Fund which will see 15,000 homes delivered ([page 3](#)). However, there are no details as to whether or not these future homes will be fit for the future, i.e. low-carbon.

Unlike the aforementioned regions, only the Swansea City Deal (and to a certain extent the Inverness/ Highland deal – [page 6](#)) capitalised on the opportunity to embed a low-carbon ethos with the necessity of new housing development. Through their Homes as Power Stations initiative, the Swansea Region deal details how it seeks to "undertake an extensive new house build and retrofit programme" which integrates technologies capable of generating, storing and, releasing energy ([page 13](#)). According to the deal, "whilst this programme will help to generate sustainable and affordable homes and address fuel poverty, it will also develop and seek to attract new sector supply chains incorporating leading research and high value manufacturing and construction operations" (iBid).

To conclude, the City Deals of Birmingham, Greater Manchester and Newcastle seem to suggest that although some regions have prioritised both Climate change mitigation and Housing as strategic priorities for their localities, there is a disconnect whereby the two spheres are seen as separate from one another. In other words, despite an interest by some regions in both Climate change mitigation and Housing, there is very little to suggest the development of *new low-carbon housing*. The Swansea Bay City Region stands as the one notable exception. However, it should be noted that despite a lack of ambition regarding carbon emission reductions in new housing development, some localities are seeking to *retrofit* pre-existing properties to make them more energy efficient (including Greater Manchester and Greater Birmingham).

4.6 Climate change mitigation and transport

Sustainable transport was not recognised as a high-level priority. However, both Climate change mitigation and Transport were identified as independent priorities.

For seven City Deals, namely, Greater Manchester, Liverpool, Leeds, Newcastle, Nottingham, Tay Cities, and Stirling, both Climate change mitigation and Transport were deemed as fundamental or important to the city region strategy.

For the most part, transport is framed as a means to drive economic growth and does not seem to necessarily imply *sustainable transport*. In the Greater Manchester deal for example, details from the City Deals documentation suggests that improved transport is seen as a means to drive economic growth, with references to sustainability referring to labour markets and business to business connectivity rather than carbon emission reductions ([page 23](#)):

“To sustain the kind of growth the economy needs means that the area will need to become more economically dense. Transport improvements focused on delivering sustainable increases in effective labour markets and business to business connectivity are therefore key factors in economic success”

A similar pattern is discernible upon analysis of the Liverpool City Deal which also places prominence on transport as a means to drive economic, not sustainable, development ([page 3](#)):

“To put transport at the heart of economic development through a revised approach to governance and creation of a joint investment fund of £800m supporting the creation of 15,000 jobs.”

Leeds, Newcastle and Nottingham City Deals, also focus on the potential of improved transport to drive economic growth. For example, the Leeds City Deal states an ambition to ([page 4](#)):

“Create a £1bn West Yorkshire-Plus transport fund to unite the Leeds and Manchester City Regions into a single functional £100bn economy.”

Only Stirling *et al.* and Tay Cities diverge from the aforementioned regions by capitalising on the opportunity to embed a low-carbon ethos with a desire for improved transport, the former through an initiative to get more people participating in active travel ([page 5](#)) and the latter through a proposed Eco-Innovation Living Lab ([page 30](#)).

With regards to the type of transport improvements sought by regions, the focus is largely on modes of public transport which are inherently more sustainable than private motorised vehicles (which according to the 2019 National Travel Survey is still the most popular form of travel throughout the UK (UK Government, 2019b)); only the Newcastle region is focused on reducing road travel times and does not refer to any public transport improvement ([page 13](#)). For example, Greater Manchester is focused on devolution of rail franchises and bus service operator grants ([page 4](#)). Meanwhile, the Liverpool City Region deal seeks to ensure that if HS2 can't service the region, then an alternative classic-compatible high speed service will be introduced to improve connectivity to London/ the South-East (as not to be at an economic disadvantage to the Greater Manchester region) ([page 15](#)). In the Nottingham City Deal, the plan includes improved tram connectivity, especially to the Creative Quarter ([page 11](#)). It is interesting to note that although these transport improvements are likely to represent a sustainable alternative to status-quo private vehicle travel, they are not discursively framed in this manner within the City Deals documents.

Of the City Deals discussed above – i.e. deals that prioritised both Transport and Climate change mitigation – only Stirling and Tay Cities demonstrated ambitions to invest in active travel. However, in the Greater Cambridge City Deal – which otherwise does not prioritise low-carbon visions – local partners confirm an ambition to construct a “comprehensive network of pedestrian and cycle routes” whilst “the main radial routes will have high quality bus priority measures”. According to the deal ([page 4](#)):

“This strategy supports carbon objectives and promotes high quality of life for local communities by minimising the environmental impact of transport whilst promoting the ability for the area to grow.”

Active travel was also cited in the Sunderland and South Tyneside City Deal. However, this is limited to the “construction of new and existing cycle and foot paths to support sustainable transport options for employees” at one key site, namely the International Advanced Manufacturing Park (IAMP) ([page 7](#)).

To conclude, analysis of the City Deals documentation suggests that, for the most part, there is a disconnect between Climate change mitigation and Transport; improved transport infrastructure is largely framed around its potential to drive economic growth as opposed to its potential to drive climate action. However, with that being said, all of the city regions discussed above (other than Newcastle) do intend to improve rail, bus and/or tram services and connectivity which is likely to constitute a more sustainable alternative to the use of private motorised vehicles. Furthermore, the City Regions of Stirling *et al.* and Tay Cities go a step further and explicitly link sustainability with their transport agendas. Meanwhile, two city regions, which otherwise express little interest in Climate change mitigation – i.e. low-carbon energy, carbon emission reductions, or environmental sustainability more broadly – possess ambitions to increase sustainable transport through the mode of active travel.

4.7 Why climate action: recurring rationales.

Having identified variation between City Deals, it is important to attempt to understand factors that may account for this. Previous analysis in this working paper has thus far investigated how temporal and regional factors – including date of deal, population size, GVA, and number of local authorities – may be associated with particular thematic priorities. To supplement this, more targeted analysis was conducted of City Deal documents in order to identify recurring narratives within the sections about climate action. We identified six factors which served as rationales for embracing climate action. As Table 7 illustrates, each city deal where climate action is important or fundamental, has embraced its own unique set of rationales. As discussed in the methodology section, this was achieved through a close-reading and thematic analysis of deals wherein climate action related themes – i.e. Climate change mitigation and Climate change adaptation – were ranked as either fundamental (4), important (3), or featured (2). This analysis revealed six recurring factors which are presented in Table 7 below.

As Table 7 illustrates, the most prevalent rationale centres around “overcoming barriers, or tackling issues” which was identified in 11 deals. For example, the Stoke-on-Trent and Staffordshire regional economy features a significant number of high-energy users, especially in the ceramics sector; their local plans for low-carbon energy generation are framed as a means to meet this high-energy demand in a climate friendly, affordable manner and thus overcome barriers to growth – which has been impacted by increasing energy prices ([page 2](#)). Meanwhile, the Swansea City region states a desire to: “place the region at the forefront of energy innovation in the areas of sustainable house building to address fuel poverty” ([page 8](#)); here the desire is to tackle issues, specifically the issue of fuel poverty.

It is interesting to note that the theme of “overcoming barriers, or tackling issues” was frequently observed throughout the data set irrespective of whether Climate change mitigation ambitions were ranked as fundamental, important, or a feature of, local ambitions.

The second most prevalent rationale for climate action centres around “building on past projects, current initiatives” which was identified in 9 deals. For example, the Greater Birmingham and Solihull deal features ambitions to “pilot new green deal solutions in the hardest to treat properties, leveraging the expertise developed through the pioneering Birmingham Energy Savers programme” ([page 3](#)). Similarly, the Tees Valley deal frames their climate action ambitions within the context of their existing achievements and progress: “the Tees Valley local authorities have already commissioned feasibility studies into two schemes and secured support from anchor users and industrial heat suppliers” ([page 7](#)). “Building on past projects or current initiatives” was only identified in deals where Climate change mitigation was ranked as either fundamental or important to strategy, not in deals where it was (only) a feature.

Other rationales which were identified include: taking advantage of geographical specificities/ natural resources (7 deals); leveraging, or building upon, existing material assets (5 deals); leveraging strong partnership with, or existing investment by, private sector (3 deals); and, leveraging existing knowledge based assets (3 deals). For more details see Appendix 5.

Table 7: Recurring factors in the narrative for climate action, organised according to the relative importance of climate action within the deals. The latter is divided into two groups; the 8 Deals where Climate change mitigation is present, and the 11 Deals where it is important or fundamental.

Region	Building on past projects & current initiatives	Taking advantage of geographic specificities/ natural resources	Leveraging, or building upon existing material assets	Leveraging strong partnership with, or existing investment by, private sector	Overcome barriers (e.g. to growth) or tackle issues (e.g. fuel poverty)	Leveraging existing knowledge based assets
Deals where Climate change mitigation is fundamental or important to strategy						
Birmingham	✓					
Manchester	✓	✓	✓	✓		✓
Liverpool		✓			✓	
Leeds	✓					
Newcastle	✓	✓	✓	✓		✓
Nottingham	✓		✓			
Stoke-on-Trent	✓				✓	
Tees Valley	✓	✓	✓			
Stirling & Clackmannanshire	✓				✓	
Tay Cities	✓	✓			✓	
Swansea		✓	✓		✓	
Deals where Climate change mitigation featured but was not fundamental or important to strategy						
Sheffield						✓
Greater Brighton				✓	✓	
Plymouth & the South West					✓	
Hull & Humber		✓			✓	
Greater Cambridge					✓	
Inverness & Highlands					✓	
Edinburgh and South East					✓	
Cardiff Capital Region						

5 Conclusions

This study set out to identify and explain policy diversity in regional City Deals, focusing especially on climate action. The City Deal represented a significant investment opportunity for local government during challenging financial times and because of the standard documentation, it was particularly suited for comparative analysis. Our findings show significant policy variation with some Deals showing strong engagement with climate action and others failing to mention it. Overall, the City Deal constitute a missed opportunity to embed climate action ambitions at local and regional levels, for Climate change mitigation (mentioned or prioritised by just over half the Deals), but even more so for Climate change adaptation, which was prioritised by only one of the 35 Deals.

Even in those regions where Climate change mitigation was found to be a priority, evidence suggests that this does not imply a holistic, embedded, low-carbon ethos. Regions which prioritised Climate change mitigation often restricted their scope to specific projects (e.g. low-carbon pilots, energy efficiency retrofits), instead of negotiating deals which had a clear commitment to carbon emission reductions throughout. By failing to recognise this opportunity, the City Deals have resulted in too much business-as-usual development; new homes that are not future proof, transport infrastructure that does not maximise social or environmental gains.

It is also concerning to note that there is no evidence to suggest that climate action ambitions are becoming more common as time goes on and the imperative of climate action becomes ever greater.

All but one of the regions who were found to prioritise Climate change mitigation or Climate change adaptation contextualised their climate action ambitions as being aided or driven by one (or more) of the following factors: (1) overcoming barriers or tackling issues; (2) building on past projects or current initiatives; (3) taking advantage of geographic specificities/ natural resources; (4) leveraging or building upon existing material assets; (5) leveraging strong partnership with, or existing investment by, private sector; and (6) leveraging existing knowledge based assets. The first factor implies a problem driven rationale and it characterises most Deals where climate action is only a relatively minor feature. The other five factors hint at the utilisation of existing synergies, which could potentially be associated with policy continuity, rather than radical change or significant innovation.

Our study focused on the City Deal because of the strong potential for comparative analysis, not because the City Deals are necessarily a great tool for tackling the climate emergency at sub-national levels. In that respect, it is possible to raise questions about the inherent qualities of a deal; deals demand negotiation, and the ability to negotiate for a low-carbon agenda will be influenced by the qualities and capacity of negotiators and their region (e.g. experience, knowledge, assets etc.). Enabling qualities and capacity will not necessarily (or indeed likely) be shared equally by all of those participating and the need for various local authorities to work together, might further complicate or dilute the ambitions for climate action.

Concerning energy demand, energy efficient housing constitutes the most prevalent solution within the City Deals text. This takes the form of housing retrofit (e.g. Manchester & Birmingham), in addition to new-build housing (e.g. Swansea and Inverness/Highland). However, findings suggest that – more often than not – there is a disconnect between housing and climate action ambitions at sub-national levels, even when both constitute local/regional priorities independently. Throughout the City Deals, considerations related to economic growth potential and numbers of homes built tend to receive prominence over that of carbon emission reduction potential and quality of homes built.

In summary, whilst the City Deal was not originally designed to prioritise climate action, it is important to note that during the last decade this policy did not seek to remedy this omission. This could be seen as a clear failure in joined-up policy making in central government, since the City Deal was a substantive policy, developed at a time when the UK already had legally binding emission reduction targets and the importance Climate change adaptation and mitigation were already well understood by scientific and policy expert communities. The fact that some City Deals did embrace climate action and others did not, suggests strongly that (notwithstanding the lack of central government push) there was important scope for more local ambition.

We observed strong diversity with regards to climate action and the fact that many local City Deals did not capitalise on this opportunity, would seem to represent evidence of repeated policy failures at the local/regional level and a lack of learning between the different Deals – especially between the early Deals (which were more ambitious on climate action) and the more recent ones. Going beyond the methodological restrictions of this desk based comparative policy document analysis, follow-up research is needed to shed more light on those policy failures, not only to understand why opportunities were missed in the past, but also to try to remedy existing strategies and (where still possible) find out how to adopt some of the good practices found in some of the deals, into the existing plans of others.



This report

This CREDS working paper aims to identify and understand diversity in sub-national ambitions on climate action across the UK. Comparative analysis between sub-national governments helps to provide insights into the drivers and mechanisms by which geographically bounded institutions and actors, including partnerships between Local Authorities, Local Enterprise Partnerships (LEPs), and the Private Sector, may manage to innovate and pursue climate action ambitions at local and regional scales – even if the central government is less ambitious in that respect. The paper is published on-line as three separate documents; this is the main report, which is complemented by the Executive Summary and the Annexes.

About CREDS

The Centre for Research into Energy Demand Solutions (CREDS) was established as part of the UK Research and Innovation's Energy Programme in April 2018, with funding of £19.5M over 5 years. Its mission is to make the UK a leader in understanding the changes in energy demand needed for the transition to a secure and affordable, low carbon energy system. CREDS has a team of over 100 people based at 15 UK universities.

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