## The governance of sustainable city business models

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### Research questions

How is sustainability and climate action governed in cities and municipalities?

How does the governance of sustainability and climate innovations in the area of **mobility, buildings** and **energy networks** differ?

Which successful governance innovations are suitable for replication relative to size and 'importance' of cities?



### Sample cities

City	Country	Interviewees	Population
Brighton	United Kingdom	2	280,000
Bristol	United Kingdom	7	445,000
Brussels	Belgium	1	1,175,000
Copenhagen	Denmark	1	600,000
Cork	Ireland	2	125,000
Exeter	United Kingdom	1	125,000
Frankfurt	Germany	2	710,000
Ljubljana	Slovenia	1	280,000
Malmö	Sweden	1	310,000
Trier	Germany	1	115,000



#### Low-Carbon Plans

Comprehensive and standalone LCPs that usually entail dedicated resources and specific units or teams for development and implementation

Mainstreamed and inclusive LCPs which usually entail the (re-) allocation of members of units or teams for the task

Limited LCPs usually addressing partial aspects of the challenge by (re-) organising work within pre-existing structures



#### Low-Carbon Plans

	Brighton	Bristol	Brussels	Copenh'n	Cork	Exeter	Frankfurt	Ljubljana	Malmö	Trier
Comprehensive and standalone LCP										
Mainstreamed and inclusive LCP										
Limited and sectoral LCP										

The larger the dot, the greater the skills and resources available for LCP development and implementation



### Putting plans into action

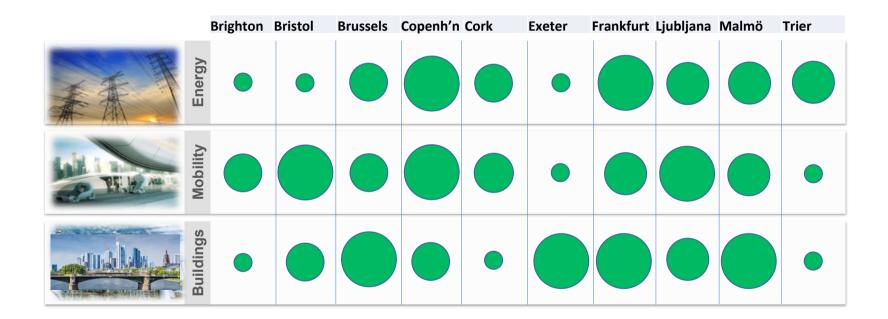
Skills and resources dedicated to Low-Carbon Plan implementation vary widely – a good plan does not imply good implementation (and vice versa)

Primary cities have greater capacities to act on sustainability and climate change issues

Government policy and regulation is a stronger driver for action in secondary and tertiary cities



### Putting plans into action



The larger the dot, the greater the skills and resources available for climate change action in key areas



### Governing city business models

Governing climate action is a function of available skills and resources as well as the mode of governance which has evolved over time

Entrepreneurial and managerial approaches are rapidly gaining traction with the rise of the 'smart city' agenda which often coincides with increasing emphasis on products and technology

Co-creation of solutions through meaningful engagement is often perceived as too costly and onerous to pursue compared to market-driven smart-sustainability fixes



### Governing city business models

### Governing by authority

Traditional topdown regulation, policies and sanctions

### Governing by provision

Shaping practices through the delivery of practical, material and infrastructure services

### Governing through enabling

Prioritisation of encouragement, facilitation and incentives

### Governing through entrepreneurialism

Outsourcing responsibility to private and community enterprise

#### **Hierarchies**

#### **Markets**

Adapted from Bulkeley and Kern 2006 and Martin et al. 2018



### Conclusion (1)

Resources and skills available to develop and implement climate action plans varies hugely which implies that the tendency to seek, transfer and implement copy-and-past solutions usually fails to deliver desired results

Primary cities often have the skills, capacity and resources to approach local climate planning and implementation comprehensively through an enabling and co-producing approach (Malmo and Copenhagen)

Cities with limited resources often depend on strong commitment by individuals and small teams for the development and implementation of climate action plans (Exeter and Brighton)



### Conclusion (2)

Local governance particularities are key to understanding how, what and why sustainability and climate action takes place

In all cases, top-down policy and regulation is the most important driver for sustained and committed sustainability and climate action

BUT it helps a lot if institutional memory is retained through leadership and structures ensuring continuity in providing (if possible) and enabling (where appropriate) through process and technique

# Thank you very much for your attention!

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