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# Maximising Europe's Low Carbon Activities

Moving from Individual Projects to  
Challenge-led, Transition Programmes

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## 1. BACKGROUND

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Martin is the dynamic Chief Executive of Coventry, a medium-sized English city, which has recently received additional funds to promote cycling. His transport officers have drawn up their suggestions for new cycling infrastructure. "I said to them this will please the existing bike riders but I want us to reach much wider. We need some systems thinking to take us out of the professional silo. Set aside a chunk of the money for cycle hire schemes; bike maintenance classes; links with schools and community organisations. Get doctors and community nurses to promote the health benefits of cycling. I want us to reach beyond the usual suspects."

Here, in a nutshell, is the challenge for low carbon projects all over Europe. Are they standard initiatives which can be pursued by the normal procedures of professional practice or do they require qualitatively new thinking that can reach out and make transitions happen? This paper argues forcibly for the latter. Martin's approach starts by asking a broad policy question – how do we get a significant increase in the number of people cycling in the city – rather than a narrow technical question – how do we spend the money? **Once you pose the question as a policy challenge then the answers are different:** they require collaboration across different professional boundaries; they combine the social with the technical; and necessitate the active co-operation of a range of actors where little previously existed. In this instance, Martin is asking for traffic engineers to engage with health professionals.

Across the whole of Europe there is a groundswell of activity as towns and cities tackle the issues of climate change. Hundreds of imaginative and innovative low carbon projects are underway. However, the overall impact is limited. The gap between individual grass roots projects and high level policy aspiration remains huge. **Currently across Europe, the whole of this low carbon endeavour amounts to far less than the sum of its parts. A key policy task is to set out an approach and a methodology that will remedy this shortcoming and help towns, cities and regions to chart a path for successful low carbon transition.**

There is a growing recognition among cities of the limitations of a traditional project approach. This paper seeks to show how:

- the challenges which Europe faces as it addresses climate change require a concerted drive for low carbon transition through systems innovation.
- a number of major cities are beginning to respond in this way and how this thinking can be strengthened and consolidated.
- based on its in-depth case studies there are a set of common features which 'badge' this approach and which many towns and cities could follow and adopt.
- European institutions should respond to this thinking and promote this approach in the implementation of the 2014-2020 European Structural and Investment Fund (ESIF) programmes.



## 2. TRANSITION CITIES

The Climate Knowledge Innovation Community (Climate KIC) is a major EU climate change programme funded by the European Institute of Innovation and Technology (EIT). Transition Cities is one of its big innovation projects.

It is tackling the task set out above in two ways. Firstly, it is focusing on more comprehensive approaches by showing how to develop low carbon clusters. This dovetails with thinking being undertaken within the European Commission which shows an increasing interest in more systemic models.

Secondly, it is studying the kinds of wide-ranging, broad initiatives that cities have already taken to tackle big

## 3. SIX CASE STUDIES

Real experience on the ground is driving public authorities to recognise the limits of individual project development and see the need to look at the bigger picture.

In Frankfurt, the authority wanted to cut energy emissions by half and reduce energy usage in buildings. There was a similar wish in Birmingham to reduce the energy inefficiency of its housing stock. In Modena and the Emilia Romagna region the pressing issue was how to help small businesses to engage with the energy efficiency and renewable energy agenda.

How to reduce the dominance of the car and introduce a wider mobility agenda has been the driving force behind the mobility initiatives in Wroclaw, Castellon and Valencia. In all these cases, it has been very clear that an individual project approach was completely inadequate. A more strategic approach addressing the particular challenge in a more comprehensive fashion has been attempted.

The report analyses the programmes that have been and are being undertaken; discusses the initiatives with key stakeholders; draws out some major lessons that will help to scale out this approach in the future; and suggests common features that characterise a challenge-led approach.

climate change issues and how successful these have been in achieving high impact. The case studies in this report assess the potential of developing a clear methodology for defining these challenge-led, transition demonstrator programmes which could then be used by towns and cities across Europe.

These two elements are linked together but this report concentrates on the second task. It assesses six separate cases where cities have recognised the **limitations of a traditional project approach** and moved towards more comprehensive programmes. These have sought to address major low carbon challenges that these cities face.

The report concludes by relating this thinking to the broader innovation models currently being developed by the European Commission.

The six case studies vary in size and ambition. None have arisen from an explicitly theoretical approach. All have been prompted by the need to address a particular aspect of the climate change challenge.

A common framework has been used to assess each of these broad initiatives. Each case study begins with some city specific context; the origins of the scheme are explained; its main features are described; some results are given and shortcomings assessed; future potential is outlined, along with key lessons.

Then the report analyses common features of these programmes and the potential for replication.

There follows a further chapter which relates these developments to the EU's policy work on broad models of innovation and how this thinking should shape the low carbon aspects of ESIF programmes.

## 4. COMMON FEATURES

These case studies cover the critical areas of buildings, energy and mobility, where cities have to reduce sharply their CO<sub>2</sub> emissions if they are to meet their EU and Covenant of Mayors targets. The studies show a **set of common features** within these challenge-led programmes, which can be used elsewhere.

The first thing that is very clear is that the goal of wholesale systemic change is qualitatively different from just organising a big project.

In making choices of this kind, politics is absolutely central. Nowhere have these challenge-led initiatives simply be left to the market. They have all required conscious intervention and leadership. They have required hard choices to be made and ultimately this has demanded politicians to make them. Yet what is clear is that to succeed with such ventures public authorities cannot act alone.

Every one of the broad initiatives Transition Cities has examined illustrates the crucial role of a wide range of stakeholders. Everywhere, it is clear that while local politicians have to take the lead with these challenge-led approaches, they will only make their mark if the full range of relevant, stakeholders is extensively engaged.

Compared to ordinary large-scale individual projects the challenge-led approach requires innovation. It cannot just be a larger version of business as usual.

In many instances this is institutional or organisational innovation, a change in governance arrangements. Frequently, this type of challenge-led programme requires other types of innovation and a break from the customs of everyday practice.

**To sum up**, the challenge-led, transition approach embraces five distinctive elements:

- a conscious decision that a new broad type of initiative is required;
- political leadership able to take responsibility and win a cross-party consensus
- the engagement of a wide range of relevant stakeholders so that an all-round comprehensive approach can be adopted with some guarantee of success
- A willingness to innovate with new forms of organisation and governance.
- A preparedness to break from business as usual and be open to new thinking, whether it be in regulation, financial and procurement arrangements or public engagement.

Challenge-led,transition programmes encompass most, if not all, of these elements. They form the 'label' by which such programmes can be recognised.



## 5. BROADER INNOVATION MODELS AND EVOLVING EU POLICY

These case studies offer important findings. They suggest a way to maximise the impact of low carbon initiatives and an approach that can be replicated by cities and regions across Europe. How should this shape wider EU thinking on innovation and climate change?

On climate change the EU has set out its position very clearly. The main target is to reduce greenhouse gas emissions by at least 20% by 2020 compared to levels in 1990. The achievement of these targets and the longer-term, more substantial goals of an 80% reduction by 2050 is no simple matter.

It shall require a combination of low carbon, technological advances with systematic transformations in the organisation and patterns of production, consumption and behaviour. These latter are a main focus of Climate KIC's Making Transitions Happen platform<sup>1</sup> and its Transition Cities programme.

On innovation the EU has recognized that a fast changing world demands new insights and thinking. Its strategy '**Putting Knowledge into practice: a broad-based innovation policy for the EU' (COM[2006]502)**' signalled a shift away from innovation as a linear process to a new 'broad-based' approach.



<sup>1</sup> <http://www.climate-kic.org/themes/making-transitions-happen/>

<sup>2</sup> **The Smart Guide to Service Innovation. Brussels 2012.** [http://ec.europa.eu/enterprise/policies/sme/regional-sme-policies/documents/no.4\\_service\\_innovation\\_en.pdf](http://ec.europa.eu/enterprise/policies/sme/regional-sme-policies/documents/no.4_service_innovation_en.pdf)

<sup>3</sup> **Ibid.** page 14.

<sup>4</sup> **Ibid.** page 16.

## MODIFY COMMISSION POLICY

The evidence of the case studies shows how much urban policy thinking is evolving in parallel with the new approaches being developed by the European Commission. However, there are a **number of important distinctions** between the approach which cities have been pursuing and that outlined in the EU's Smart Guide to Service Innovation.

Firstly, Transition Cities stresses urban or metropolitan rather than wider regional focus. There is a balance to be struck here between density and concentration on the one hand and the need for a canvas that is sufficiently wide to achieve economies of scale on the other. Other elements within Commission thinking do include this specific urban dimension, such as within the ESIF regulations and in the work on smart cities. It would be sensible if this spatial

diversity was recognised explicitly in future editions of the Smart guide to Service Innovation.

Secondly, Transition Cities specifically defines its **cluster approach as 'challenge-led'** with an emphasis on the key importance of transition. To define the approach as 'large-scale demonstrator' is conceptually confusing. It would be clearer and simpler to just define the approach as 'challenge-led' and to call for 'challenge-led, transition demonstrator programmes.'

We think that the Commission should **adjust its policy** on these issues. That would give a specific urban dimension to its policy statements and greater clarity to the type of systemic, high impact, challenge-led programmes it is seeking to encourage.

## THE CHALLENGE-LED, TRANSITION APPROACH AND ESIF PROGRAMMES

This is particularly important because **the findings of this report should be used to influence the activities funded by the new 2014-2020 ESIF programmes.**

The Commission's determination to follow a broad model of innovation is shown by its commitment to facilitate synergies between EU funding sources and, in particular, to link together its research and its Structural Fund programmes.

The findings from these case studies are particularly important here. Along with its work on clusters, **Transition Cities is suggesting that a challenge-led, transition demonstrator approach is the way to get high value and real impact from low carbon programmes.**

**The focus on a clear challenge linked to clusters helps to build a critical mass of activity and avoid the dangers of piecemeal fragmentation** and isolated, stand-alone projects that have little wider impact.

There are sizable allocations for low carbon initiatives within the 2014-2020 ESIF programmes. There is a real danger of a 'pepper-pot' approach with low carbon projects being scattered across Europe's regions. DG Regional Policy needs to minimise this risk.

It should avoid the possibility of a patchwork quilt of unrelated, low carbon projects springing up across Europe. Rather it should be **encouraging a challenge-led, transition approach as a model to be followed across its ESIF programmes.**

This targeted approach focusing on key challenges would give a concentration of resources and help the whole of ESIF's low carbon activity to add up to more than the sum of its parts.

**Jon Bloomfield**  
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