
European innovation for the low carbon society

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- A major European Union initiative with top-level political backing and a significant budget It is.
 - Key driver of sustainable economic growth and competitiveness across Europe through the stimulation of world-leading innovation
 - The main instrument will be Knowledge & Innovation Communities (KICs) addressing major societal challenges.
 - Each KIC will bring together key players, institutions and businesses in its chosen field.
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New European innovation policy

- New '**broad-based**' approach (COM[2006]502)
 - Successful innovation requires 'demand' pull from citizens and consumers as well as 'supply' push from universities and business.
 - Innovation takes 'many forms' such as novel advances in organizations, services and business models, and is not limited to new technologies alone
 - Societal challenge led innovation needs a 'wide partnership'
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New European sustainability policy

- a **‘comprehensive path’** for the **‘transition towards a low-emission economy’** (20/20/20 policy COM[2008]30).
 - the most significant emission reducing innovations in the decade to 2020 will draw on existing technologies.
 - the capacity for more radical future change also needs to be established in this period.
 - innovations will involve consumers as well as producers - everyday consumption as well as low carbon energy production
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Importance of regions

- This type of innovation strategy is best undertaken within geographical areas of a size and diversity able to test out developments on a sufficient scale.
 - The Midlands (UK) was the home of the first Industrial Revolution and has been at the heart of engineering and manufacture ever since.
 - We want to be at the forefront of the new low carbon revolution. Our goal is to be a demonstrator region: a model on putting 2020 targets into practice.
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Mike O'Brien

Energy & Climate Change Minister

- 'The West Midlands was the birthplace of the old industrial revolution. Our region could potentially be the cradle of the new low carbon revolution'

Birmingham Post, 13 February 2009



Regional Innovation Implementation Community

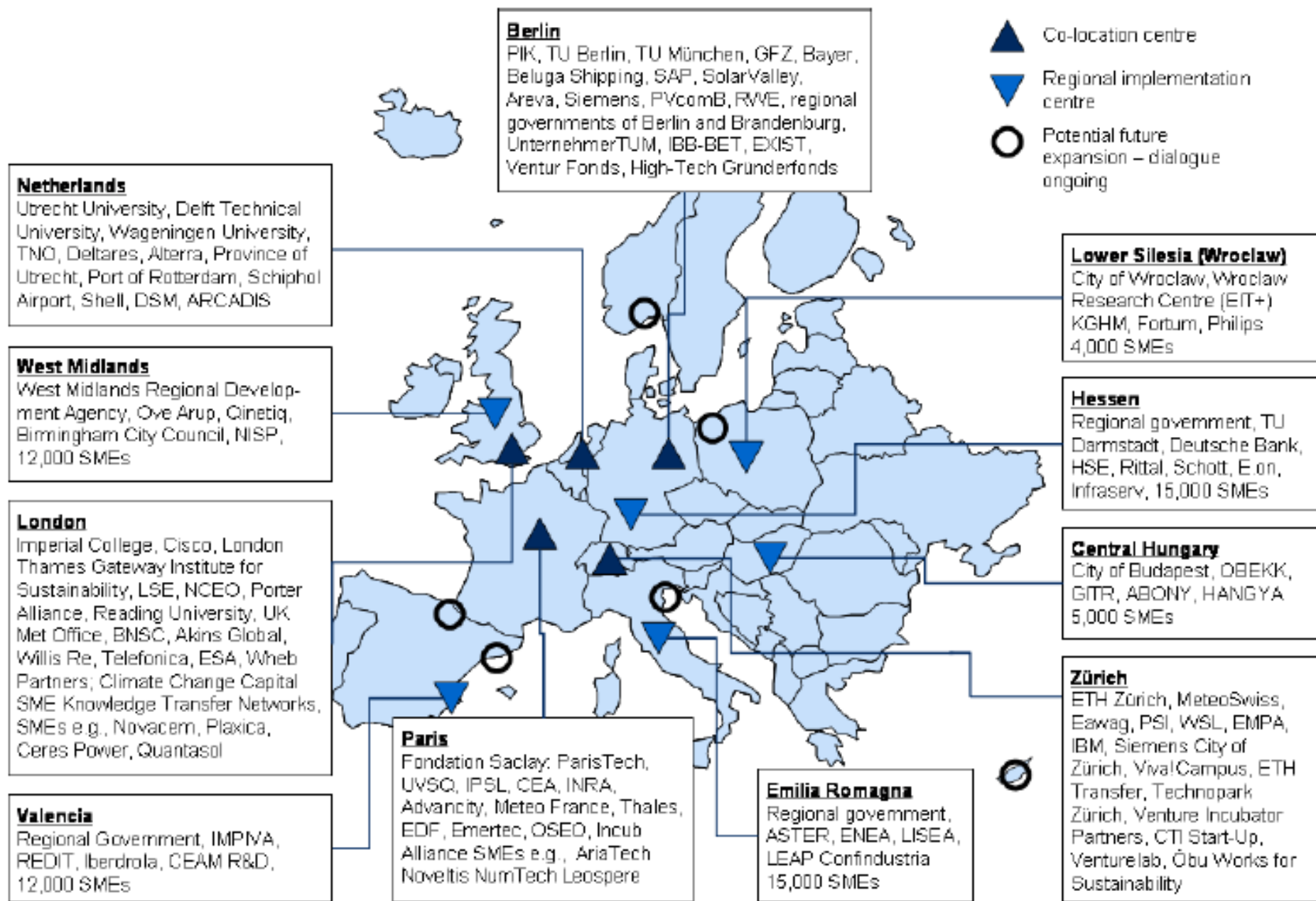
- designed explicitly to create generalised knowledge about the processes of systemic innovation for the transition to a low emissions economy and their economic application, not specialised knowledge about a specific technical field.
 - focus in two particular areas, where the reduction of greenhouse gas emissions can make a real contribution to the achievement of Europe's 2020 targets, namely around the issues of **household living** and **transport/mobility**.
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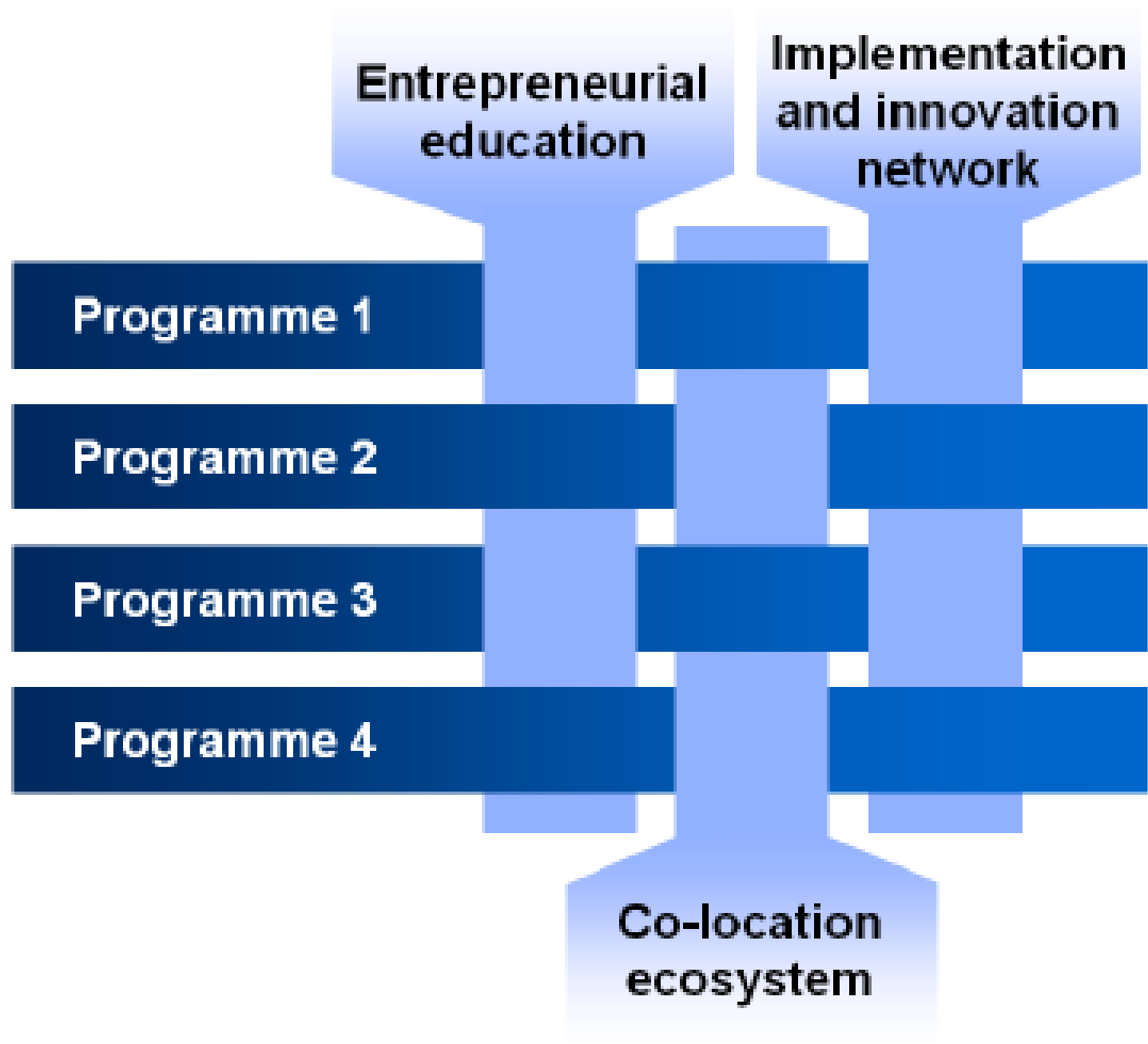
New capabilities needed

- Understanding of systemic (not singular) innovation
 - 'Learning by doing' - sociotechnical experiments
 - Framing goals in terms of societal outcomes rather than technical inputs
 - Promoting 'bottom up' innovation to complement the 'top down' carbon market
 - Need for new interdisciplinary boundary spanning competences
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The Climate Change KIC

- The RIC led by AWM is part of a bid for a Climate Change KIC
 - Pioneers in practice programme
 - European low carbon innovation festival
 - Access to research programmes & postgraduate education opportunities
 - New ventures & innovation projects
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The concept

- Focus on two areas: low carbon living and low carbon mobility
 - Use a range of low carbon demonstration projects underway or in the pipeline as the test bed for understanding system innovation
 - Create a new interactive space for learning between different technical areas and business sectors, and between universities and innovation practice in the wider world
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Low carbon living

- Distributed energy systems – biogas, combined heat and power
 - More energy efficient housing stock – retrofitting and new build
 - Consumer driven energy management systems from a smart meters to social norms
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Low carbon mobility

- Efficiencies within the internal combustion engine regime – modes of mobility, vehicle choice and design and driver behaviour
 - New directions in personal vehicles – hybrid, electric, fuel cell etc
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Low carbon transition platforms

- Networks of demonstration projects defined by outcome not technology
 - Incremental & radical
 - Netherlands 'transition competence' expertise
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Low carbon crucible

- Interactive workshops aimed at young researchers, managers, policy makers
 - Shared frameworks
 - New ideas
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Low carbon ‘innovationfest’

- Annual event hosted by partners in turn
 - bring together all the KIC participants in one location for a series of workshops and activities
 - leading figures in this area and Commission and European leaders, combined with activities designed to engage a wider public
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The future competitiveness agenda

- Focus on innovation for a low carbon society
 - Human and organisational capabilities for systemic innovation
 - Public and consumer engagement
 - Competence based regional competitiveness
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