World - Class Research & Innovation Culture

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PRESENTATION BY

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Climate – KIC

Innovating for low carbon prosperity and climate resilience

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Climate change and innovation

Context

- Climate Change perceived as a medium term issue
- Mitigation and adaptation issues: very different communities
- Knowledge- and academia-driven in many areas
- Connections with several other environmental issues (energy transition, resource scarcity …), which provide opportunities
- Markets not mature in general; few exceptions such as re-insurance
- Important drivers: civil society, local governments: Regions and Cities are important KIC partners
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Approach

Our triangle is a pyramid

Our 110 partners span top:
• Universities (28)
• Research institutes (14)
• Business (29), SMEs (22)
• Regional and local governments (14)
• NGOs (3)

We bring together all the actors of the innovation pyramid.....

...and integrates these with our three pillars:
• Innovation
• Entrepreneurship
• Education
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Approach

- we are connectors
- we privilege systemic innovation
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Approach

**Ecosystem:**
The research and knowledge base (CLC, RIC)

**Innovation:**
Pre-seed investment

**Entrepreneurship:**
Seed investment

**Scaling up:** make the transitions happen
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Developing tools and scaling up innovation

3 exemplary projects

- OASIS: developing an open-source catastrophe model for the insurance sector
- SMART URBAN WATER: developing new services from interoperable sensors and interconnected data
- Neighborhood demonstrators: developing new Business/Finance/Community Structures for scaling up innovation
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Developing tools: OASIS

1. Create a professional community: re-insurance, SMEs, academia engaged in a company

2. Develop an open source catastrophe model which:
   - Increases transparency
   - Helps new knowledge to be included

3. Involve KIC partners specialized in climate related risk management
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Developing tools: OASIS

Plug and play modules developed by KIC partners

The open-source core: essential for insurance companies
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Developing tools: Smart Urban Water

A **key objective**: develop new services by facilitating interoperability of information production

A **secondary objective**: develop pervasive low cost sensor networks

A first application related to water in cities

Spinn-off created

Disdrometrics

Where rainfall is measured

Where most people live
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Developing tools: Smart Urban Water

Develop new services and connect to end-users

Ensure interoperability

Produce data (using a.o. pervasive sensors and information from it)

KIC partners, new start-ups

Integrator tool (developed by IBM)

KIC partners

New projects in preparation: develop this approach for other climate variables, develop interface for geolocalisation
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Scaling up innovation: Neighborhood demonstrators

Our tools

- Analysing innovation with public authorities in regions
- Climate market accelerator
- Demonstrator and living labs networks
- Platform: making the transitions happen

One example: developing new Business/Finance/Community Structures for scaling up building retrofit and renewable energy development

Bromley-by-Bow and Poplar – east London

Global review of best practice finance/business structures & proposal for local application

Smart Communities Plan assessing “community resilience” and set up of community owned projects

Pilot established for community budget consolidating different funding streams
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Conclusions and questions

- How to design the process?
  - Combine technology-push and user-driven approaches
  - Analyse/benchmark existing innovation initiatives regarding success and impact
  - Q. how can we move toward more open innovation initiatives in Europe?

- How should public bodies and innovative companies complement each other?
  - Public bodies should develop a stable and enabling environment (remove barriers, change procurement rules, develop innovative financing schemes…)
  - Demonstrators and awareness raising should help convince politicians and decision makers
  - Q. how to select priorities?
Thank you for your attention

“The future is here, it's just not evenly distributed yet”, William Gibson