Shifting Trends in Innovation policy & Cluster Cooperation between China and the EU

Guangzhou, November 24, 2014

1. Innovation as a Driver of Smart Growth...

2. Which Clusters are we talking about?

3. Questioning New Frames of World Value Chains...
The Regional Policy, in implementing the Europe 2020 strategy in terms of smart growth with its flagship initiative, Innovation Union, aims at unlocking the growth potential of the EU by promoting innovation in all regions. Regional policy is really considered by the European Commission as a key means of turning the priorities of Innovation Union into practical action on the ground.

If can so help meet the major challenge for Member States and regions of increasing innovation capacity and R&D in businesses and strengthening their links with universities & research centres.

Part 1

EUROPE 2020 Strategy

The Three Pillars of the Death Valley

Source: EURADA - Inspired from the presentation of Gabriel M CREAN's in 'Regions for Economic Change 2012' – Adapted by JM Rousseau
Knowledge Exchanges for Easing the Market Development

- Clusters are not a mere aggregation of firms — need cohesion & coherence.
- Clusters do not entail just individual actors and inputs, but groups of those actors and institutions organise themselves and interact within the given conditions to produce efficiency and value.
  - Clusters foster innovation because they foster knowledge exchange among firms, colleagues, rivals...
    + Knowledge institutions, such as universities in close proximity.
  - Cluster initiatives may sponsor education/training activities, encourage relationship building through joint market assessment and marketing.

- Policymakers focus on the real-world dynamics of local economies:
  - Labor market pooling,
  - Supply-chain interactions,
  - Knowledge spillovers,
  - Interaction between institutions, firms...
The Cluster Paradigm

- At this moment of deep economic uncertainty, the concept of community policy makes it appropriate to revisit the Cluster paradigm & consider its special relevance.

- It also is true that as a matter of policy action, clusters are all about synergies and efficiencies.

- Pointing to impact, strong clusters tend to deliver positive benefits to workers, firms and regions.

What Strong Clusters may consist of and aim at?

- foster innovation through dense knowledge flows and spillovers;
- strengthen entrepreneurship by boosting new enterprise formation and start-up survival;
- enhance productivity, income-levels, employment growth in industries & positively influence regional economic performance.

Clusters reflect the nature of the real economy and highlights the real-world interactions, connections, transactions...

after a period of delusion and over-simplification.

Key Specificities of European Clusters

- Geographical concentration, due to the need of external economies of scale, social capital and learning processes;

- Specialisation, centered around a core activity to which all actors are related;

- Aggregation of actors beyond the firms, such as public authorities, academia, representatives of the financial and service sectors...;

- Interlinks of actors, in terms of both competition and co-operation;

- Critical mass in order to achieve inner dynamics;

  - Creation of a policy dialogue between stakeholder to launch initiatives on joint projects and ongoing with long-term perspectives;

  - commitment of the stakeholders in process of technological, commercial and/or organisational changes;
Both for Chinese and EU Clusters, cross-border cooperation is an essential element for their new development strategies aiming to unlock local potential from past trajectories.

The challenge lies in defining functional Clusters according to firms' dynamics and knowledge flows space, rather than according to political boundaries.

Thus two critical questions emerge:

- How to ensure the mutual benefit?
- What are the main obstacles and barriers?

### BARRIERS TO INTERNATIONAL COOPERATION BETWEEN CLUSTERS

<table>
<thead>
<tr>
<th>Barriers to International Cooperation</th>
<th>2010</th>
<th>2007</th>
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<tbody>
<tr>
<td>Lack of financing or other monetary reasons</td>
<td>30</td>
<td>26</td>
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<tr>
<td>Lack of time or capacity</td>
<td>25</td>
<td>22</td>
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<tr>
<td>Lack of trust between partners</td>
<td>20</td>
<td>15</td>
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<tr>
<td>Language barriers</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Geographical distance</td>
<td>12</td>
<td>9</td>
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<tr>
<td>No concrete common starting points for actions / project ideas</td>
<td>10</td>
<td>7</td>
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<tr>
<td>Conflicts of interests / partners are competitors</td>
<td>10</td>
<td>8</td>
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<tr>
<td>Lack of a common technological basis</td>
<td>7</td>
<td>8</td>
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<tr>
<td>Other</td>
<td>1</td>
<td>2</td>
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</tbody>
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Source: INSTITUTE FOR INNOVATION AND TECHNOLOGY, European Clusters go international, Networks and clusters as instruments for the initiation of international business cooperation.
**CHINESE SWOT ANALYSIS**

**INTERNAL ANALYSIS: STRENGTHS**

- Accessing EU know-how in ICT
- Gaining EU market access for the Chinese industry
- Learning from EU research implementation and management procedures
- Supporting EU-Chinese production value chains through R&D support
- Training of Chinese researchers
- Development of common solutions for global challenges
- Good Chinese – EU relations are a strong base for fruitful common research.

**INTERNAL ANALYSIS: WEAKNESSES**

- Languages & cultural barriers hinder fruitful exploitation of research cooperation
- Limited market access in EU for Chinese enterprises hinders fruitful exploitation of research cooperation
- Educational shortcomings in parts of EU
- Unclear advantages for Chinese industry
- Low quality of EU Commission-funded research
- EC administrative procedures are too difficult
- Different IPR approaches in EU & Chinese research programmes
- Difficulties in defining common goals with DG CONNECT.

**EXTERNAL ANALYSIS: OPPORTUNITIES**

- Gaining market access in Europe
- Implementing Chinese standards in Europe
- Access to EU human resources
- Access to EU know-how and technology
- Understanding advanced EU methodologies
- Enhancing the general relationship between Europe and China
- Improving the experiences of Chinese researchers
- Improving Chinese research capacities.

**EXTERNAL ANALYSIS: THREATS**

- Losing control of Chinese IPR
- Brain-drain on favour of Europe
- Losing contact to other global research nations
- Losing exclusivity of Chinese data and, therefore, creating competitive disadvantages for China
- Losing Chinese resources for European projects with questionable outcomes.

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**EUROPEAN SWOT ANALYSIS**

**INTERNAL ANALYSIS: STRENGTHS**

- Know-how inflow coming from Chinese partners
- Cheaper research services
- Widespread dissemination possibilities in China
- Potential market access
- Use of testing possibilities not available in Europe
- Implementation of EU standards in China
- Better understanding of Chinese research system.

**INTERNAL ANALYSIS: WEAKNESSES**

- Different work cultures lead to irritations, delays and significant communication and management efforts
- Europeans felt it is difficult to understand Chinese organisational structures and Chinese hierarchy, leading to irritations and work delays
- Europeans should be better prepared to make dissemination in China more effective
- Unclear import/export rules for know-how intensive goods.

**EXTERNAL ANALYSIS: OPPORTUNITIES**

- Market access for European technology
- Access to qualified labour / improvement of European research quality
- Improve European innovations system by learning from China
- Quicker development of technology in benefit of Europe
- Influencing Chinese civil society with European standards
- Chinese respect Europeans more than Americans, and this advantage should be used for common developments.

**EXTERNAL ANALYSIS: THREATS**

- Unwanted know-how transfer to China while Chinese protect their technology better
- Quick assimilation of new knowledge in China
- Competitive advantages as China can exploit commonly developed ideas cheaper
- Violation of IPR
- Limited law enforcement of European entities in China.
CUMULATIVE INSTALLED (MW)
WIND POWER CAPACITY 1995-2011

Sources: Earth Policy Institute (2010) and WWEA (2011)

A Partnership on Equal Terms with Benefits

- Cooperation should be based on mutual interests and benefits, as well as the principle of reciprocity and information visibility, although flexibility;
- Key expected benefits of cross-border cluster cooperation is to access to new opportunities & skills and attract investment in order to strengthen their respective competitiveness by approaching new knowledge and markets;
- EU and Chinese Clusters should build any cooperation by focusing on their future development strategies;
- IPR issues need to be clarified and strictly monitored to build trust before further engagement.

Thank you for your attention!