

PGI 00040 BRIDGES project

Bridging competence infrastructure gaps and speeding up growth and jobs delivery in regions

Good practice theme 1 Industry-led centres of competence as innovation infrastructures & RIS3 intermediaries and Interregional Work Group 1 (IWG1)

Burgos, 03/04 November 2016

CEEI-Burgos, PP8 Advisory partner



International Working Group 1 - IWG1

- The good practices selected and described within the framework of GP theme1: Industry-led Competence Centres as innovation infrastructures, will be discussed in depth by the Interregional Working Group1 (IWG1) formed by regional development agencies, business network associations, research centres and regional authorities through their stake holders' groups.
- In BRIDGES project, Interregional Work Group 1 (IWG1) will discuss the alignment of academic and public research with enterprise and industry needs.

IWG1 members and coordination

- PP1: Kainuun Etu Oy, FI
- PP3: Lubelskie Voivodship, PL Stakeholders group
- PP4: Regional Council of Uusimaa, FI Stakeholders group
- PP5: Development Agency of Western Macedonia, GR
- PP6: Soca Valley Development Centre, SI
- PP7: Pannon Business Network Association, HU

IWG1 will be coordinated by PP8 CEEI-Burgos (Centre of Competence) and PP9 Hellas Institute for research and technology (ESIF & RIS3).

IWG1 objectives and anticipated results

IWG 1 will be requested to discuss and eventually develop recommendations on the best practice basis, especially in the following key areas:

- Funding models for cost effective Competence Centres (CCs), including sustainability issues. Leveraging of resources.
- Establishment of industry-led programmes and agendas.
- Governance structures able to ensure the continued engagement of the key stakeholders.
- Coordination of activities among different CCs: Regional, national and cross-border approach.
- Performance management and metrics which encourage the desired strategic impacts.
- Competence Centres as key regional RIS3 smart specialization implementation units.

Recommendations on these aspects will be expected from the IWG 1.

Good Practice Theme 1

Industry – led Competence Centres as innovation infrastructures & RIS3 intermediaries

GP theme 1 is the baseline for developing the knowledge exchange within the framework of IWG1. The purpose is to identify good practices highlighting Industry-led Compentence Centres in terms of innovation infrastructures and key regional RIS3 implementation units.

The focus areas of the good practice exchange should be aligned with IWG1 priorities

Focus areas

- Policy implementation: Competence Centres as key regional RIS3 implementation units.
- Networking issues:

. Connecting industrial companies sharing common R&D interests

. Transfer of knowledge between the markets and the academia.

- Innovation process: Direct impact on the involved companies processes (Commercialization, technology transfer, patents and licences, exports and spin-offs)
- Funding and financing issues: Public-private mix.

Critical aspects

- Long term impact on the sales of the companies involved as a result of the innovation.
- Opportunity to engage in higher risk and longer term market oriented R&D
- Practical, dynamic and cost effective interaction between industry and academia.
- Leverage of other non-public R&D funding streams.

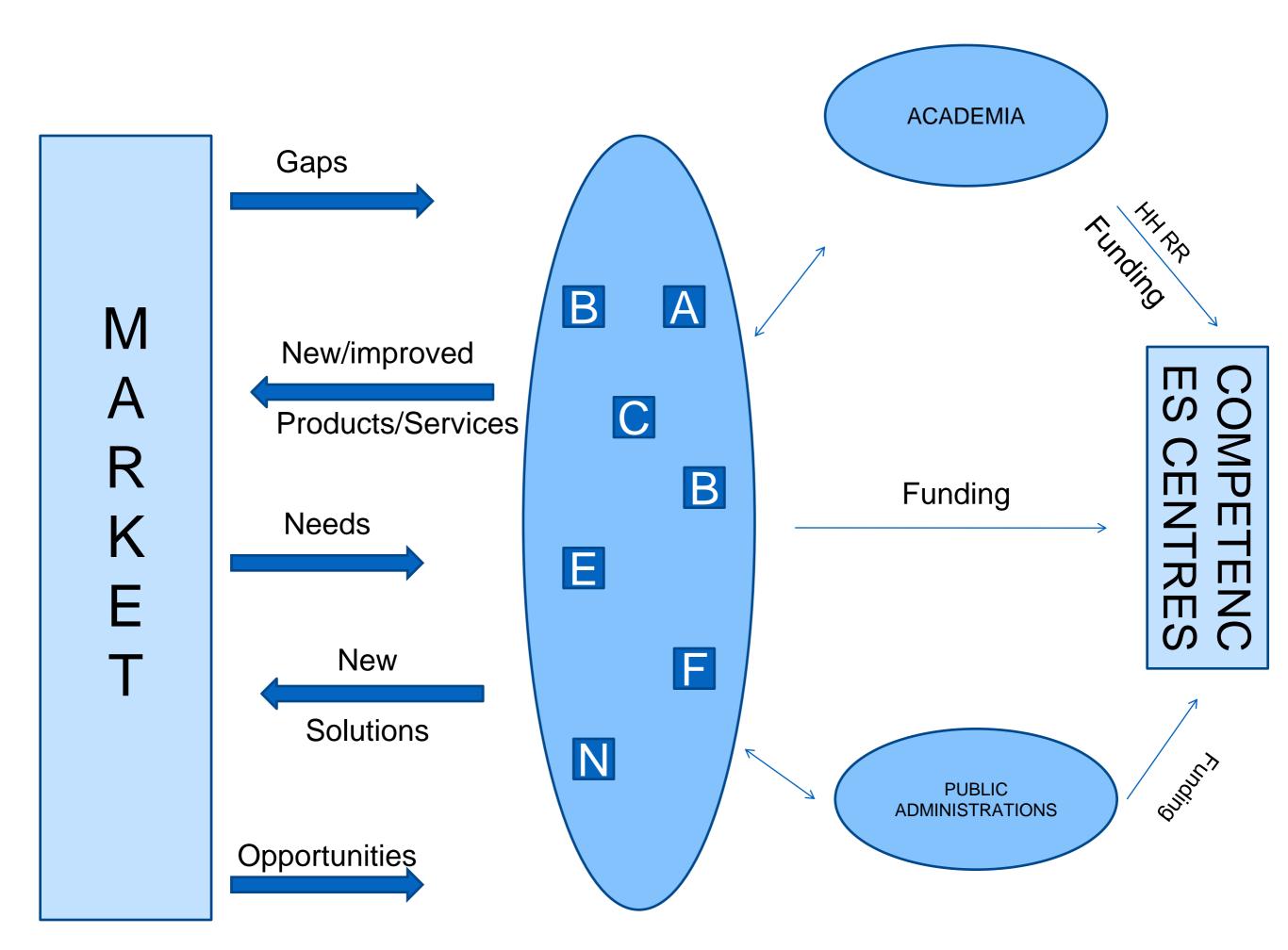
Centre of Competence I

- Collaborative entity/organization set up and led by industry, being resourced by highly-qualified researchers in association with research institutions in order to carry out market focused strategic research for the benefit of the industry related.
- Centres of Compentece are normally sectorial entities/organizations.

Centre of Competence II

Different approaches/concepts

- Centres of Compentece.
- Innovation agencies.
- Development agencies



Benefits for the Public Administration

- Market oriented R&D and innovation activities in accordance with the real needs of the industry of their communities.
- Leverage of additional R&D and innovation oriented private resources.
- Talent attraction (Researchers)

Benefits for the companies

- Competitive edge: Higher risk /longer term research into market opportunities.
- Strategic direction and management of the CCs direct input/influence.
- Easier access to IP and early influence on its exploitation.
- Networking with senior researches that could lead to further developments (Other regional, national or EU inititiatives)
- Opportunity to hire highly-skilled graduates.

Benefits for the researchers

- Longer term research funding mechanism
- Dynamic interaction with industry.
- Opportunity to directly take part in business/industry projects: Spin off, IP exploitation...

GP theme 1 description criteria

- Policy implementation
- Networking issues
- Innovation processes
- Funding and financing.

GP theme 1 description criteria I

Policy implementation: Competence Centres as key regional RIS3 implementation units:

- CCs should take advantage of the RIS3 funding opportunities to implement projects for the benefit of the regional companies
- CCs need to adjust their research innovation priorities to the RIS3 priorities of the region
- The regional Competence Centre will gather research results and cooperate with research centres/universities/researchers/professors to transfer these results to the companies

GP theme 1 description criteria II

Networking issues:

- Connecting and gathering industrial companies with common research interests and active R&D performers
- Transfer of knowledge between the markets and academia.

GP theme 1 description criteria III

Innovation processes: Direct impact on the involved companies processes in terms of:

- Commercialization of products and services.
- Technology transfer processes.
- Patents and licences
- Exports, spin-offs.

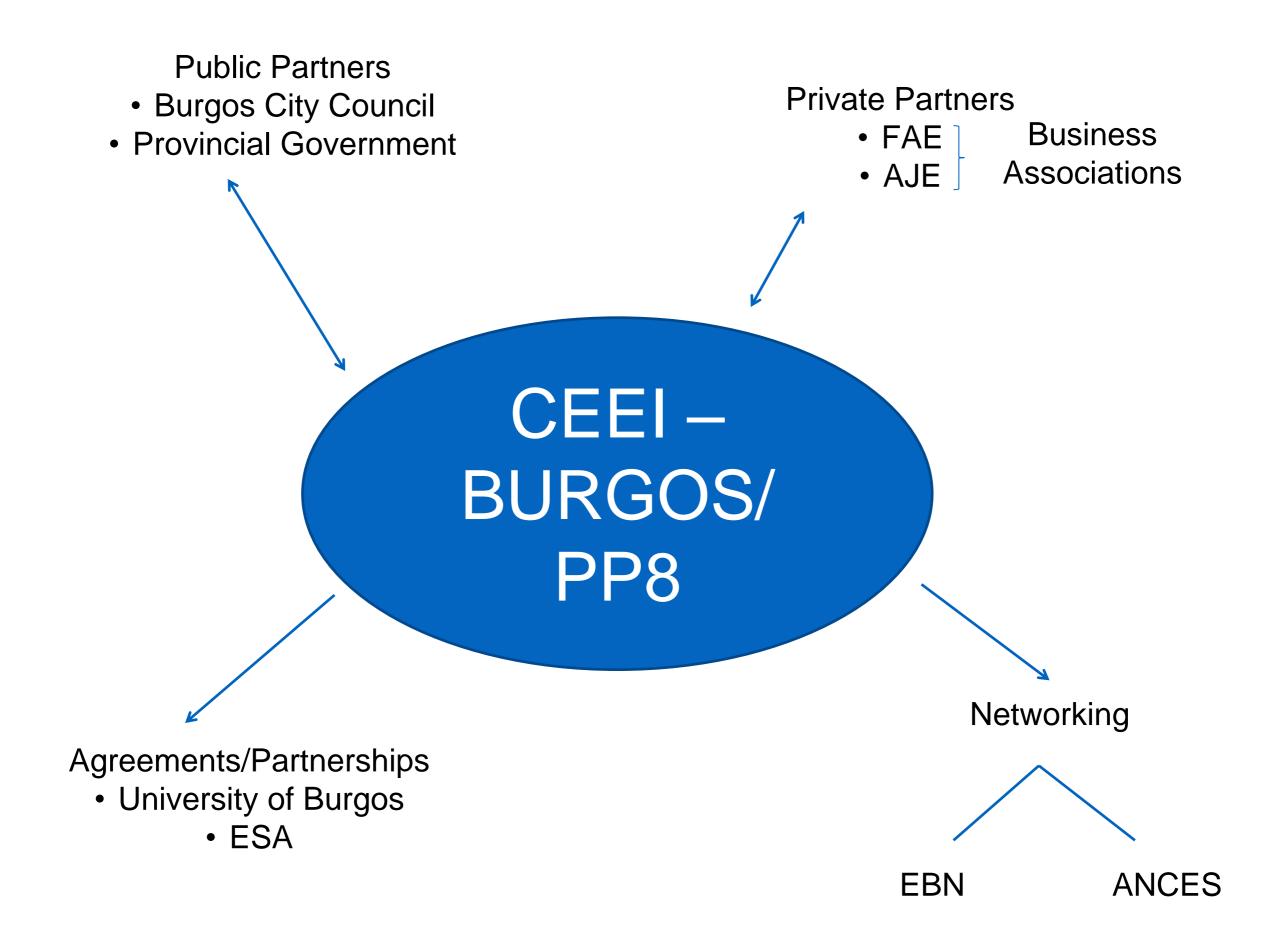
GP theme 1 description criteria IV

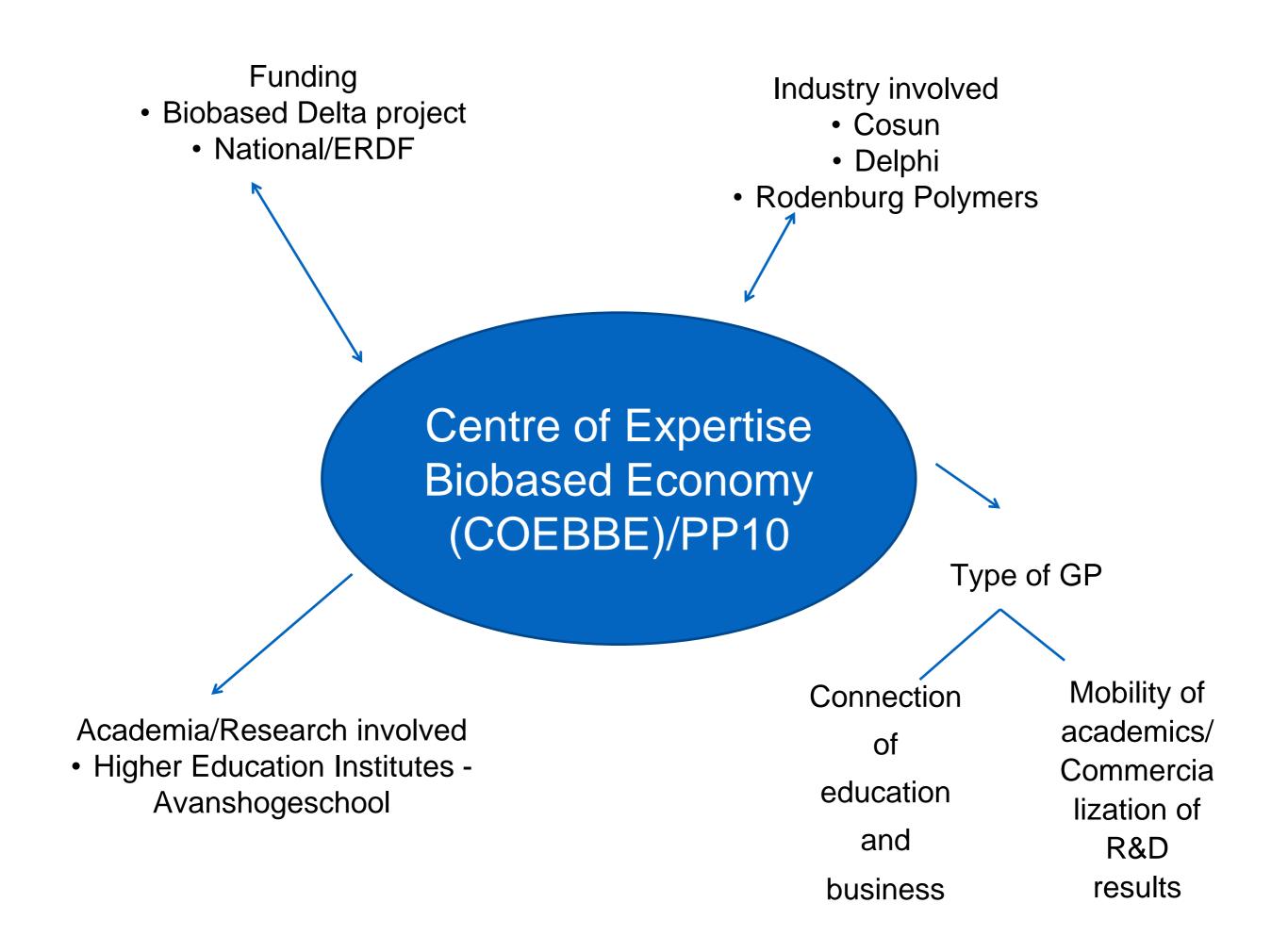
Funding and financing issues:

- Public-private mix. Leveraging of resources for innovation development.
- Self-sustainability.

GP theme 1 template

- Introduction/Executive summary
- Good practice description:
 - Conceptual background
 - Justification
 - Characterization
 - Implementation process
 - Quality management
 - Effectiveness and efficiency
 - Follow up and conclusions





Funding

- ETH Foundation (Includes industry members)
 - Collaboration with other
 universities

Cooperation between ETH Zürich, industry, government and society.

ETH Zürich Centres of Competence

> 14 Centres of Competence -6 related to Bioeconomy

Cross-disciplinary approach: Energy science, biomedical, plants,environment and sustainability

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- Thought as a system (Key ideas). Bohm, David. *Routledge 1994*
- The innovator's dilemma: When new technologies cause great firms to fail. Christensen, Clayton M. *Harvard Business School Press 1997*
- The knowledge-creating company: How Japanese companies create the dynamics of innovation. Nonaka, Ikujiro & Takeuchi, Hirotaka. *Oxford University Press 1995*

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- Report of the CREST working group on Industry-led competence centres: Aligning academic / public research with enterprise and industry needs 2008. <u>http://ec.europa.eu/invest-in-research/pdf/download_en/illc.pdf</u>

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- European Commission, "Guide on Research and Innovation Strategies for Smart Specialisation", <u>http://s3platform.jrc.ec.europa.eu/documents/20182/84453/RIS3+Guide.pdf/fceb8c58</u> <u>-73a9-4863-8107-752aef77e7b4</u>
- International mega-trends and growth prospects of the Finnish biotechnology industry: recent economic research and policy implications. Raine Hermans, Martti Kulvik and Pekka Ylä-Antila. *Journal of Commercial Biothecnology.*
- How innovation agencies work: International lessons to inspire and inform national strategies. Alex Glennie and Kirsten Bound. <u>www.nesta.org.uk</u>
- Organising for local development: the role of local development agencies . Debra Mountford. OECD LEED Programme

IWG1 implementation and themes

- Sem 1, establishment of IWG1.
- Sem 2, IWG1 meeting 1: Introduction of the IWG1, discussion of broad policy backgrounds and characteristics in relation with CCs.
- Sem 3, IWG1 meeting2: Discussion of results of GP theme 1 outputs and the regional benchmarking exercises and potential transferabilities.
- Sem 4, IWG1 meeting 3: Recommendation of the IWG1 members for issues to be included into the industry led centres of competence and RIS3 implementation infrastructures action plan unit AC1.
- Sem 5, IWG1 meeting 4: Following the peer review of the draft action plan, the IWG1 team convenes to adjust action & endorsement plan recommendations for the action plans.
- Capitalisation report: semester 6.

