

Czech cluster policy: Achievements and Challenges

The Cluster Development in the Moravian-Silesian Region

Pavla Bruskova
Regional Development Agency,
Ostrava, Czech Republic



Impulses for a good cluster policy

„Cluster Policy: Breaking the Glass Ceiling“

Dr. Christian Ketels, Clusters in Europe II,
Budapest, 27/01/2010

From a few successful cluster islands ... to a more competitive economy

*Matching a **bottom-up** operational approach with a clear **top-down** concept for the use of clusters in economic policy*

*We can ask **more** from clusters if we do enough for them:*

- fund*
- measure*
- assess*
- manage*
- control*
- revise*

Sectorial diversification

*– new industries **beyond** manufacturing:*

Innovation, services & creativity



Building Cluster Initiatives in the Czech Republic

ANALYSIS & AWARENESS BUILDING

- Feasibility study to identify industrial groupings in North Moravia for targeted state aid (2002)
- Training regional authorities, universities and firms; certification of cluster facilitators and managers (Ifor Ffowcs-Williams)
- Promotion of the cluster concept through different channels (national conferences, PR)

2002

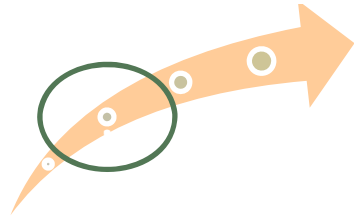
STRATEGY & IMPLEMENTATION

- Institutional responsibility: The CzechInvest State Agency
- National Cluster Strategy – adopted by the government in 2005
- National Cluster Study (statistical survey)
- Establishment and development of cluster organisations, rules & methodology
- International cooperation – participation in European projects

FUNDING

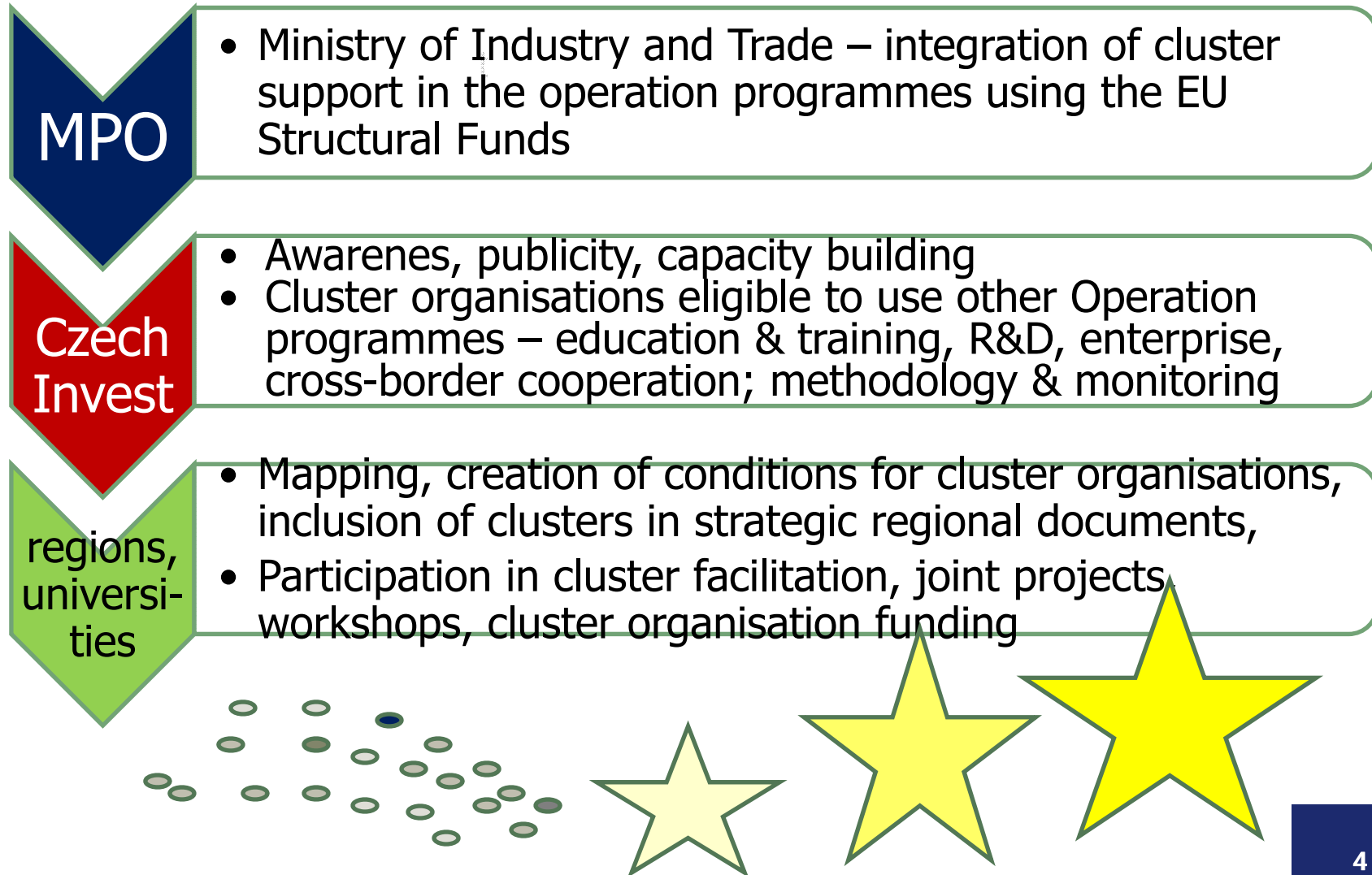
- Adapting programme to company/cluster needs (eligible costs)
- Launching Operational Programme Industry and Enterprise – Clusters (2005)
- Launch of the new Operational Programme Cooperation – Clusters (1st call March 2009, 2nd call May 2010)
- Some €40 mil. spent from the EU Structural Funds

2010



Matching a bottom-up operational approach with a clear top-down concept

Czech top-down initiative 2004-06





National funding programmes

CLUSTERS - mapping and facilitation of cooperation (2004-2008)

- Total applications / Approved applications: 67/42
- Total amount of support / Used support: 1.3 M€ / 1.1 M€

CLUSTERS – funding of cluster organisation activities (2004-2008)

- Total applications / Approved applications: 18 /14
- Supported cluster organisations: 12
- Total amount of support / Used support: 9.9 M€ / 8 M€

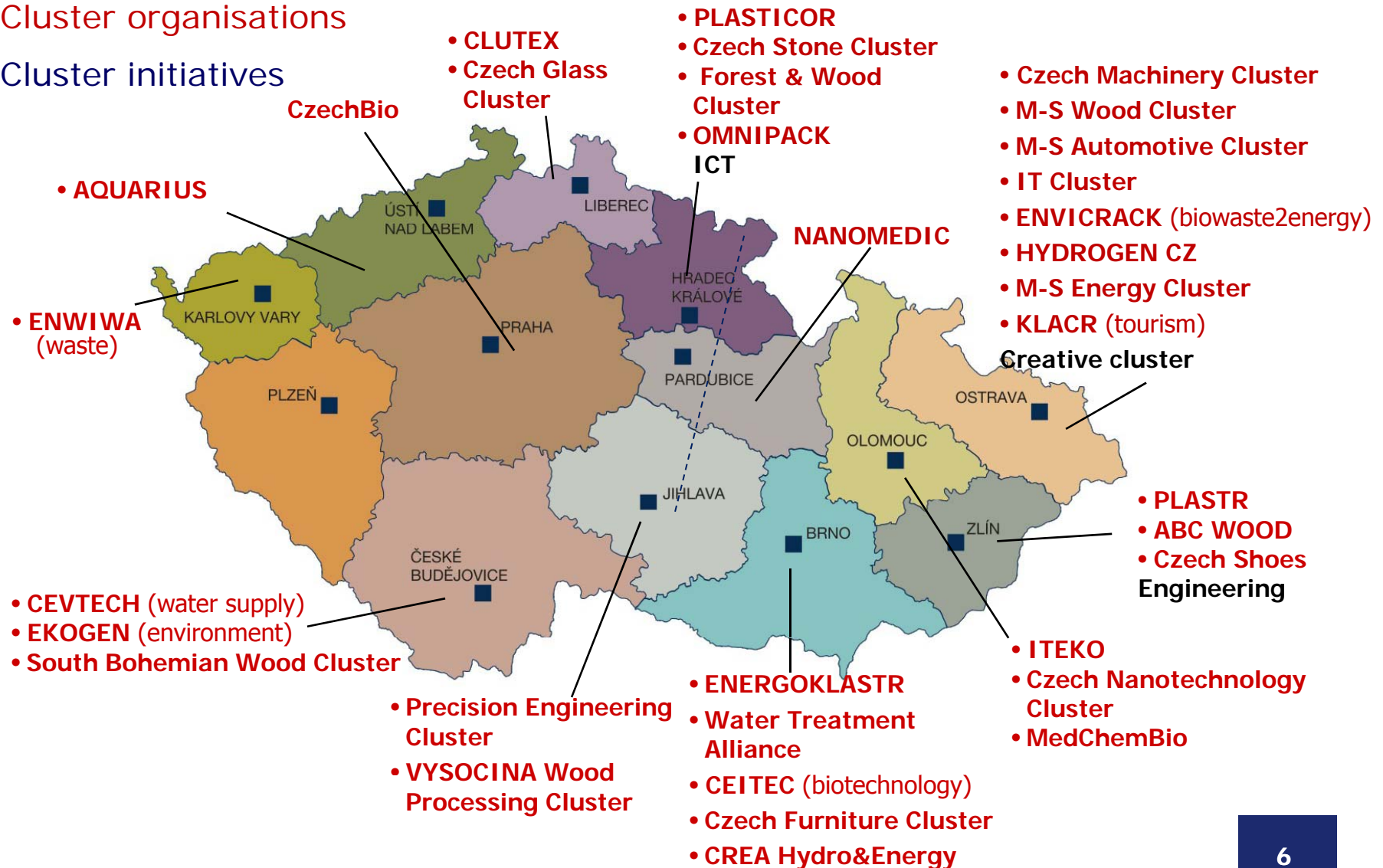
COOPERATION – cluster organisation joint projects (2007-2013)

- Total amount of support : 31.5 M€
- The subsidy per project: 120,000 € – 3.2 M€
- Total applications (2009): 44
 - Out of it from the MSR 6 (6.5 M€)
- Profound feasibility study with obligatory indicators for joint projects (number and quality of innovative and R & D projects)

From a few successful cluster islands ... to a more competitive economy

■ Cluster organisations

■ Cluster initiatives





A Typical Czech Cluster Organisation (1-5)

1. A formalized legal entity established in any of the following forms according to the Czech law:
 - Association of corporations and individuals
 - Interest association of legal entities
 - Cooperative
 - Generally beneficial company
 - Liability limited company (not implemented)
 - Joint stock company
2. Minimum 15 members to be eligible for funding (the current average is 30 members, max. around 50);
3. The participation of a university (specialized department) and/or a research institute is a condition – new relationships and projects;
4. The membership should include 60 % of SMEs;.
5. Prevailing mode of cooperation: joint projects for the benefit of the industry development and overcoming the barriers limiting the advance; expectation of the enhancement of commercial opportunities



A Typical Czech Cluster Organisation (6-10)

6. Type of cooperation: Triple Helix, the support from regional authority is more or less neutral;
7. Funding designed to NACEs in processing industries and ICT while existing cluster organisation operate (appear) in a variety of sectors :
 - Processing industries: machinery, wood, plastics, automotive, textile, packaging;
 - Technologies: environmental technologies, biotechnology, renewable & alternative energy; nanotechnology
 - Horizontal services: ICT, tourism, logistics and transport (at the start)
8. Priority dedication to R & D and innovation;
9. Territorial scope: regional at the beginning, expanding to neighboring regions (cross-border) or nationally;
10. Cluster management team: average 2 persons (max. 5, min. 1 (even extern)); cluster manager often locked in the operative level, so far lukewarm to internationalisation.



The Moravian-Silesian cluster support

- ❑ Grants for cluster organisations from the regional authority's budget
 - ❑ **2005 – 2008 Individual approach** – depending on needs of cluster organisations (innovation projects, human resources & education, events, seminars, PR, office expenditures)
 - ❑ **2009 (2010) Flat scheme** - grants for elaboration of documentation for project applications to strengthen the regional funding absorption of the EU Structural Funds, co-funding the setting-up research infrastructure with universities, active role of COs in spin-offs

The volume of regional grants for COs of cc €400,000 leveraged some 9 M€ from national funding programmes.

- ❑ Incorporating the **ClusterNet** regional initiative among the funded activities of the RDAO, within the compensation agreement with the regional authority (cc 1 man-year committed) since 2006.

ClusterNet Regional Initiative



- ❑ RDAO - creating conditions for networking, information sharing, exchange of experience between clusters and raising the effectiveness of COs:
 - Regular meetings of cluster managers and other partners (universities, practitioners); transfer of best practices in cluster management; inter-cluster collaboration
 - Representation of regional clusters at international events (The Competitiveness Institute, Europe Innova, EURADA) and in international projects (NICE, CLOE, ECD), tracking the trends and their application in the regional environment
 - Monitoring and evaluation of COs performance for the needs of the regional government; feedback to national grant providers (common standpoints on programme conditions; advocacy of cluster organisations as eligible applicants)

MSR: Sectors organised in clusters

❑ Machinery – Czech Machinery Cluster (2003)



❑ Wood – Moravian-Silesian Wood Cluster (2005)



❑ Renewables - ENVICRACK (2005)



❑ Hydrogen technologies – HYDROGEN-CZ (2006)



❑ Information technologies – IT Cluster (2006)



❑ Automotive – Moravian-Silesian Automotive Cluster (2006)



❑ Power industries – MORAVSKOSLEZSKÝ ENERGETICKÝ KLASTŘ (2008)



❑ Tourism – Moravian-Silesian Tourism Cluster (2008)



❑ Industrial safety - Safety Engineering Cluster (2010)

Czech Machinery Cluster

- a cluster process case

- Established in March 2003 as a civil society organisation (a non-profit legal entity) called the Moravian-Silesian Engineering Cluster

2006

- Change of vision and scope of activities: from general to specific (explicit specialisation)

Designed as a horizontal platform for the whole engineering sector with a tendency to quit heavy machinery



Specialised cluster in power, transport and construction machinery



Setting apart of the automotive sector - giving a stimulus for the Moravian-Silesian Automotive Cluster

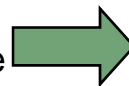
- The evolution of the member base:

2003	2004	2005	2006	2010
35	30	18	36	50

- Change of the brand and image



- Beneficiary of member fees
- The sole representative of the cluster movement



- Active source of opportunities and support for its members
- Recognised organisation for collaboration in a network of clusters



Czech Machinery Cluster: main activities and leaders

Supply chains

– enabling smaller cluster members to participate in big contracts for power industry, nuclear power and ecological engineering (CNG)

Purchase alliances

- cost reduction of joint purchasing based on quantity discounts

Internalisation

through export and investment: India, Argentina, Turkey, China



Cooperative projects

– Innovation in training engineers for nuclear power; Innovation in professional training at secondary schools (energy resources of the 21st century); HRD for R&D teams, New talents for science and research



VÍTKOVICE MACHINERY GROUP
ŽĎAS



Strojírny Třinec, a.s.





2007 - 2008

Decline of the top-down initiative

Continuity of the government support through the EU SF (no cluster mapping and facilitation phase calls) - vulnerability of COs due to the dependence on the national funding scheme (changes of terms, delays in payment); funding available only in the MIT competences (processing industry and ICT)

Position and role of CzechInvest weakened; No existing contact point to act outwards and inwards for the benefit of the cluster concept and internationalisation; Lack of integrated information and data on the national level.

Low awareness, minimum inter-cluster & social communication, regional fragmentation, isolation of cluster initiatives; goals of the National Cluster Strategy not completed

2008 – 2010

Start of the bottom-up initiative

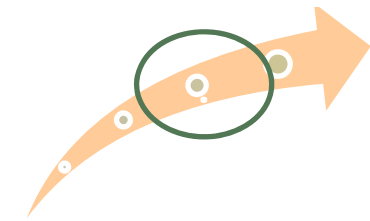
- The establishment of the **National Cluster Association (NCA)** to ensure coordinated and sustainable development of cluster initiatives in the Czech Republic on the basis of information, knowledge & expertise concentration, advocacy of clusters towards government, aligning with the European Commission recommendations and policies.
- A non-profit association of individuals and legal bodies, registered on 30 December 2008
- Constituent general assembly held in Prague on 18 March 2010
- 17 constituent members:
 - 12 cluster organisations
 - 2 universities
 - 2 RDAs
 - 1 private consultant company



Mission:

„The National Cluster Association creates a long-term and competent platform for the development of cluster initiatives within the Czech Republic and an active interface for their internationalization.”

We can ask more from cluster if we do enough for them

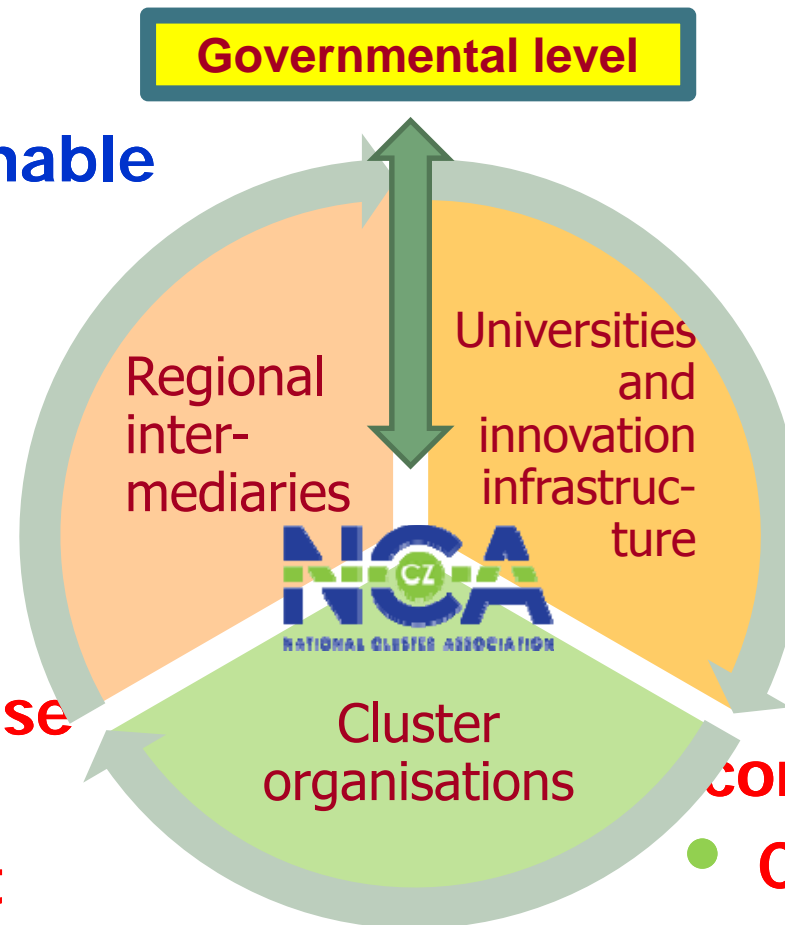


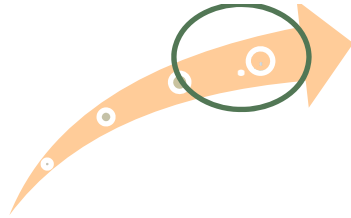
What do we do for the best cluster exploitation?

- Facilitate /Enable
- Learn/Train
- Fund
- Measure
- Assess
- Manage
- Control, Revise
- Strategic development

What can we require/expect?

- Trust
- Cooperation synergies
- ROI
- Job creation, FDI, Regional development
- R&D&I + commercialisation
- Competitiveness





New industries beyond manufacturing

Although the processing industries are leaders within the top-down cluster support – the Moravian-Silesian Region continues to keep its cluster primacy also in other fields:

- **1st Czech cluster organisation in industry 2003**
- **1st Czech cluster organisation in services 2008**
- **1st Czech cluster initiative in creative industries 2010**



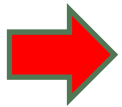
Black Meadow Cluster



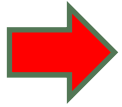
Lessons learned - success factors



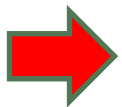
The need for a multi-sources cluster funding policy based on a non-discriminatory sector support (so far processing industry NACEs only). - The US administration's 2011 budget model. **The availability of funding should not be the only impulse for clustering**



Setting up rules for regional and national sphere of competence (start-up clusters and developing clusters under the care of the region; developed and accredited clusters under the care of a national programme - The Hungarian model). **Consistent interlinking of innovation and cluster policies**



The quality of cluster depends on the quality and experience of cluster management, the personality and experience of cluster manager. **Enhancing the professionalism of cluster management** by training, knowledge sharing, social events, setting-up criteria for cluster management certification – **the path to cluster excellence**



Successful facilitation of isolated companies to cooperate in clusters does not automatically mean that cluster organisations will be open to cooperation among themselves. **The role of national integrator (NCA) in the cultivation of cluster environment:** to respect the principles of openness towards cooperation and internationalisation & **maximize the yield of these values.**

1. Conceptual sustainability:

- focus on the Czech cluster policy

- Reinforcing the cluster organisation role based on quality, performance, benchmarking and excellence – offering and application of effective methods
- More intensive interlinking clusters and national innovation and competitiveness policies

2. Financial sustainability:

- external & self-financing

- Structural Funds + European R&D/ETC joint projects;
- Regional seed grants for non-industrial cluster incubation;
- Multi-sources government approach (USA Budget FY2011 model)
 - Economic Development Administration (EDA)-- \$75 million Regional Innovation Clusters program
 - The Small Business Administration - support EDA's cluster effort by directing a proposed \$11 million
 - The Department of Labor (DOL) - newly proposed Workforce Innovation Fund (of up to \$108 million)
 - The National Science Foundation (NSF) plans to invest \$12 million to promote new "NSF Innovation Ecosystems"
 - Department of Agriculture's (USDA);
- Exist strategies for public funding to be included in cluster business plans (based on tangible assets created through public investments);
- Excellence track record to be provided commercially through consultancy, mentoring, know-how transfer.



for cluster sustainability *in the Czech Republic III.*

3. Sustainability of HR

- Critical mass of specialist personnel capacities for cluster competencies

- ❑ Facilitator, cluster manager, project managers in the cluster organisation team, corresponding capacities /interlocutors at universities, national and regional institutions of the public sector and in private sector.
- ❑ Training and cultivation of the community to perceive the role of the cluster manager as „the manager for the strategic development of the specific industry and the change management“
- ❑ Attracting students to the HBS „Microeconomics of Competitiveness“



**Cluster management training and popularization;
Cluster managers' certification; Internationalisation.**

for cluster sustainability *in the Czech Republic IV.*

4. Information sustainability

- To stay within the European stream

which will help us


- Think forward
- Act in advance
- To

be



Not to miss the milestones and key opportunities , such as

- Creation of first 3 clusters by the European Technology Institute: Climate, InnoEnergy and ICT
- New EU innovation plan to boost 'creative clusters, Talent, technology and tolerance' key to attracting creative workers



„Although clusters are predominantly a market-driven phenomenon, forward-looking public policies, business initiatives or top-class universities and research institutes have been instrumental in the emergence of strong clusters by acting as a catalyst and helping to unleash the economic and scientific potential of particular regions.“

**Towards world-class clusters in the European Union,
Brussels, 2008**

Thank you for your attention

Pavla Bruskova
CEO
Regional Development Agency Ostrava
Na Jizdarne 7
702 00 Ostrava
Czech Republic

bruskova@arr.cz; www.arr.cz;
(www.nca.cz; info@nca.cz)

Tel: +420 731 505 929

