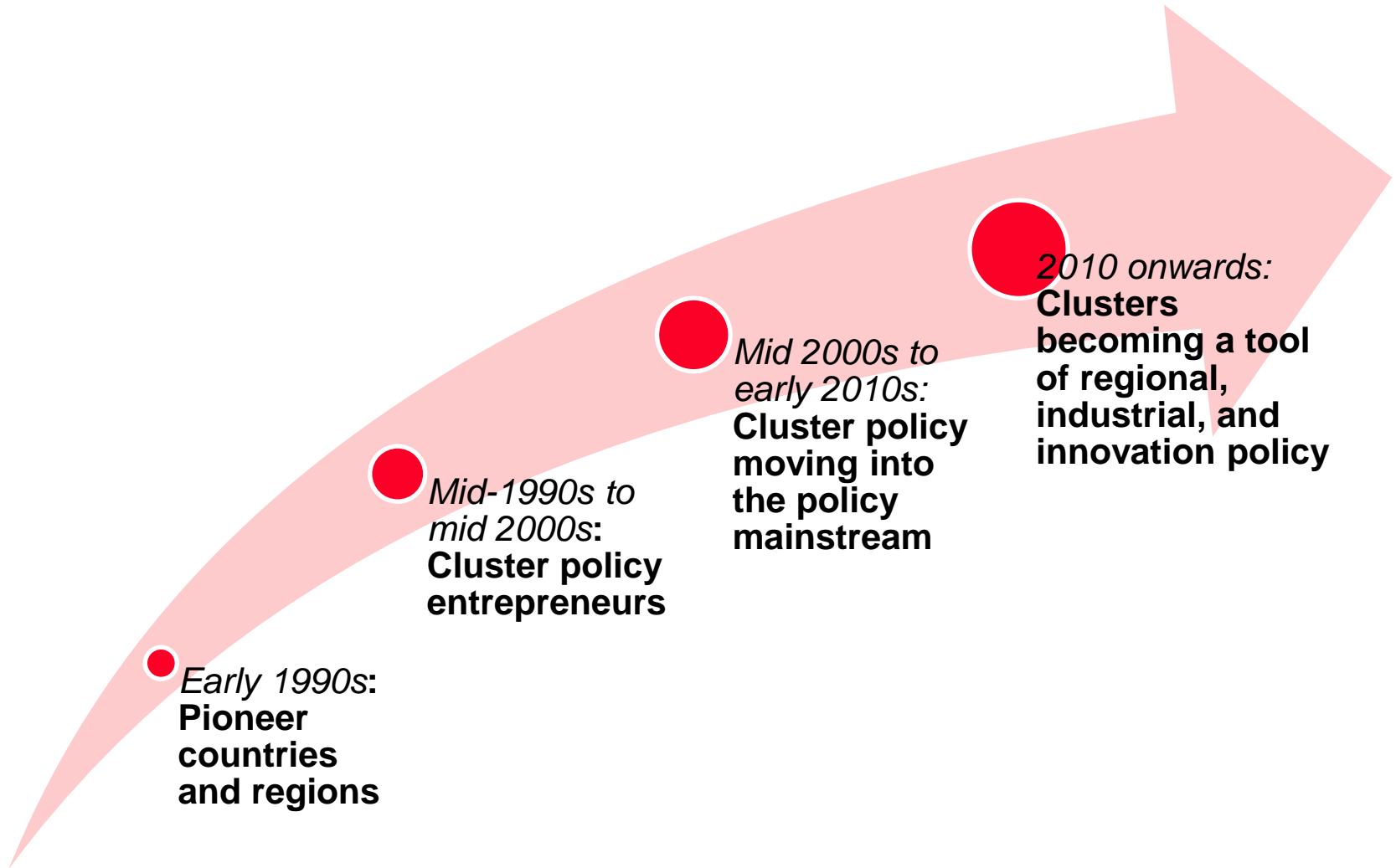


Two Decades of Cluster Policy Efforts in Europe: Looking Back, Looking Ahead

Dr. Christian Ketels
Institute for Strategy and Competitiveness, Harvard Business School
President, TCI Network

*Clusters in Europe IV
Budapest, Hungary
30 November 2017*

The Changing Face of Cluster Policy

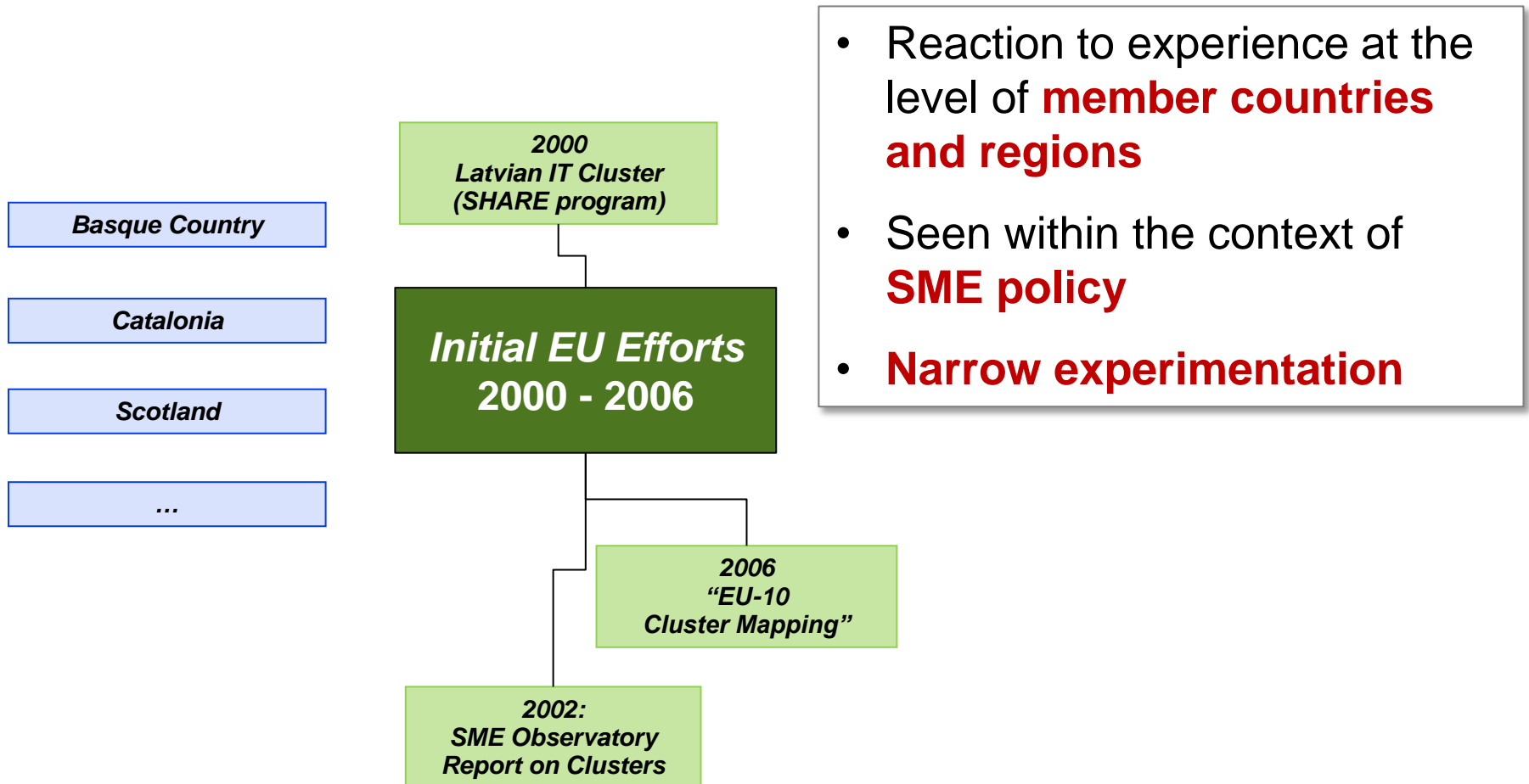


Concerns about
distortions

Concerns about
impact

The Emergence of Cluster Policy in Europe

Timeline



The Evolution of Cluster-Driven Economic Policy

Basque Country, Spain

**Institutions
(1980s)**

**Efficiency
(1990s)**

**Innovation
(2000s-)**

**Machine Tools
AFM, 1992**

**Appliances
ACEDE, 1992**

**Automotive
ACICAE, 1993**

**Port Logistics
UNIPORT
BILBAO, 1994**

**Environmental
Services
ACLIMA, 1995**

**Electronics,
Computing and
Telecom
GAIA, 1996**

**Energy
CLUSTER
ENERGIA, 1996**

**Aeronautics
HEGAN, 1997**

**Maritime
Industry ORO
MARÍTIMO
VASCO, 1997**

**Paper CLUSTER
PAPEL1998**

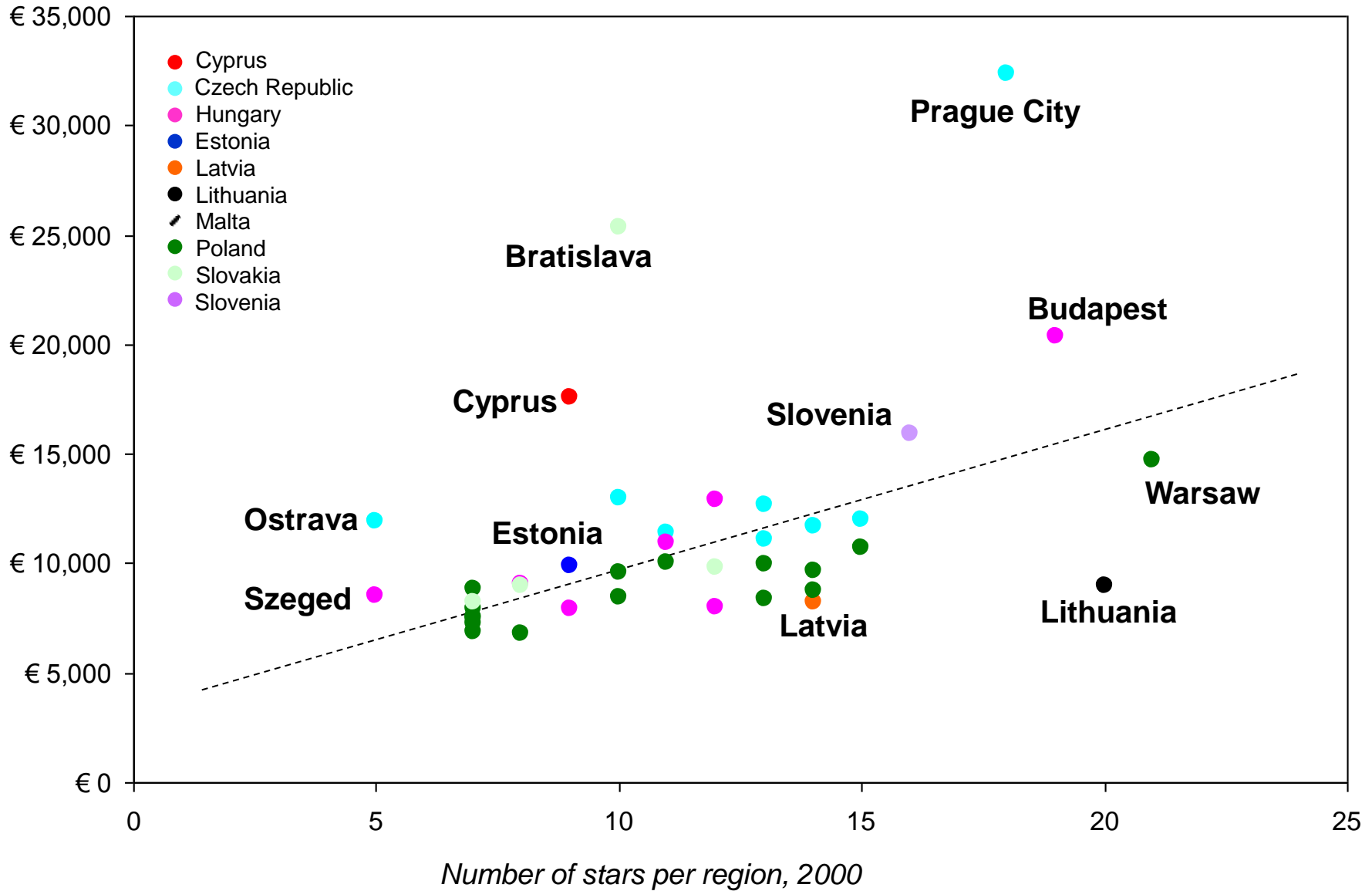
**BioBasque,
2002**

**Audiovisual
EIKEN, 2004**

**Transport and
Logistics
CLUSTERTIL,
2005**

EU-10 Cluster Analysis (2003)

GDP per Capita, 2002



Cluster Policy in Europe: EU Activities

Timeline



2000
Latvian IT Cluster
(SHARE program)

Initial EU Efforts
2000 - 2006

2006
"EU-10
Cluster Mapping"

2002:
SME Observatory
Report on Clusters

1. Phase
2007 - 2009

2008
"Commission
Communication on
Clusters"

2008
"European Cluster
Memorandum"

- Introduce a **consistent idea** of cluster efforts
- Provide **data** on the presence and role of clusters
- Create **support** for use of cluster efforts
- Broad **experimentation** with support for many networks

The European Cluster Observatory

Cluster policy

Cluster Policy Report
UNITED KINGDOM

Cluster data

European Cluster Observatory - Microsoft Internet Explorer

http://www.clusterobservatory.eu/index.php?country_id=1®ion_id=1&cluster_id=1

European Cluster Observatory

Cluster Mapping Database

Name	Region	Cluster category	Filter
Cluster Mapping	Europe, all	Biopharma	1-3 stars
Cluster Organisations	> Select country/region	> Select cluster category	> Select filter
Cluster Policies			
Cluster Library			
Join Observatory			
Methodology			
Links			
Contact			

Biopharmaceutical regional clusters in Europe
1, 2 and 3 star regional clusters

Cluster	Employees	Size	Spec.	Focus	Stars	Innovation	Exports	Notes
Nordwestschweiz (Basel), CH	23 741	2.64%	8.87	3.97%	***	N/A		
Île de France (Paris), FR	47 493	5.78%	2.27	1.01%	**	High	Strong	
Lazio (Rome), IT	23 990	2.67%	2.40	1.07%	**	High	Strong	
Uttar Pradesh, IN	20 563	2.59%	2.66	1.13%	**	N/A	Weak	
Darmstadt (Frankfurt am Main), DE	16 459	2.00%	2.64	1.18%	**	High	Strong	
Kispest-Magyarország (Budapest), HU	14 197	1.73%	2.62	1.17%	**	High	Weak	
Centre (Orléans), FR	13 960	1.70%	4.36	1.95%	**	Medium		
Karlsruhe, DE	13 207	1.61%	3.11	1.39%	**	High	Strong	
Mazowieckie (Warsaw), PL	11 522	1.40%	2.27	1.01%	**	Medium	Weak	
Berlin, DE	10 356	1.26%	2.27	1.01%	**	High	Strong	
Stockholm, SE	10 325	1.26%	2.39	1.07%	**	High	Strong	
Tübingen, DE	9 650	1.17%	3.68	1.65%	**	High	Strong	
Freiburg, DE	9 591	1.17%	3.69	1.38%	**	High	Strong	
Région Wallonne (Liege), BE	9 454	1.15%	2.31	1.03%	**	Medium		
Rheinlaan-Pfalz (Mainz), DE	9 061	1.10%	3.45	1.54%	**	High	Strong	
Lombardia (Milan), IT	34 808	4.23%	1.91	0.85%	*	Medium	Strong	
Cataluña (Barcelona), ES	25 485	3.10%	1.78	0.80%	*	High	Strong	
Madrid, ES	19 397	2.16%	1.54	0.89%	*	High	Strong	

Innovation: Data is for region, regardless of cluster category. Based on 2006 European Regional Innovation Scoreboard, MERIT
Exports: Data is national export data for the cluster category, regardless of region. Based on International Cluster

THE EUROPEAN CLUSTER MEMORANDUM

Promoting European Innovation through Clusters:
An Agenda for Policy Action

Prepared by

THE CONCEPT OF CLUSTERS AND CLUSTER POLICIES AND THEIR ROLE FOR COMPETITIVENESS AND INNOVATION:
MAIN STATISTICAL RESULTS AND LESSONS LEARNED

Commission Staff Working Document
SEC (2008) 2637

Cluster organisations

European Cluster Observatory - Microsoft Internet Explorer

http://www.clusterobservatory.eu/index.php?country_id=1®ion_id=1&cluster_id=1

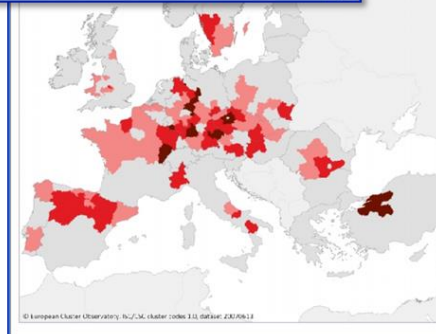
European Cluster Observatory

Cluster Mapping Database

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Cluster Library			
Join Observatory			
Methodology			
Links			
Contact			

Cluster organisations

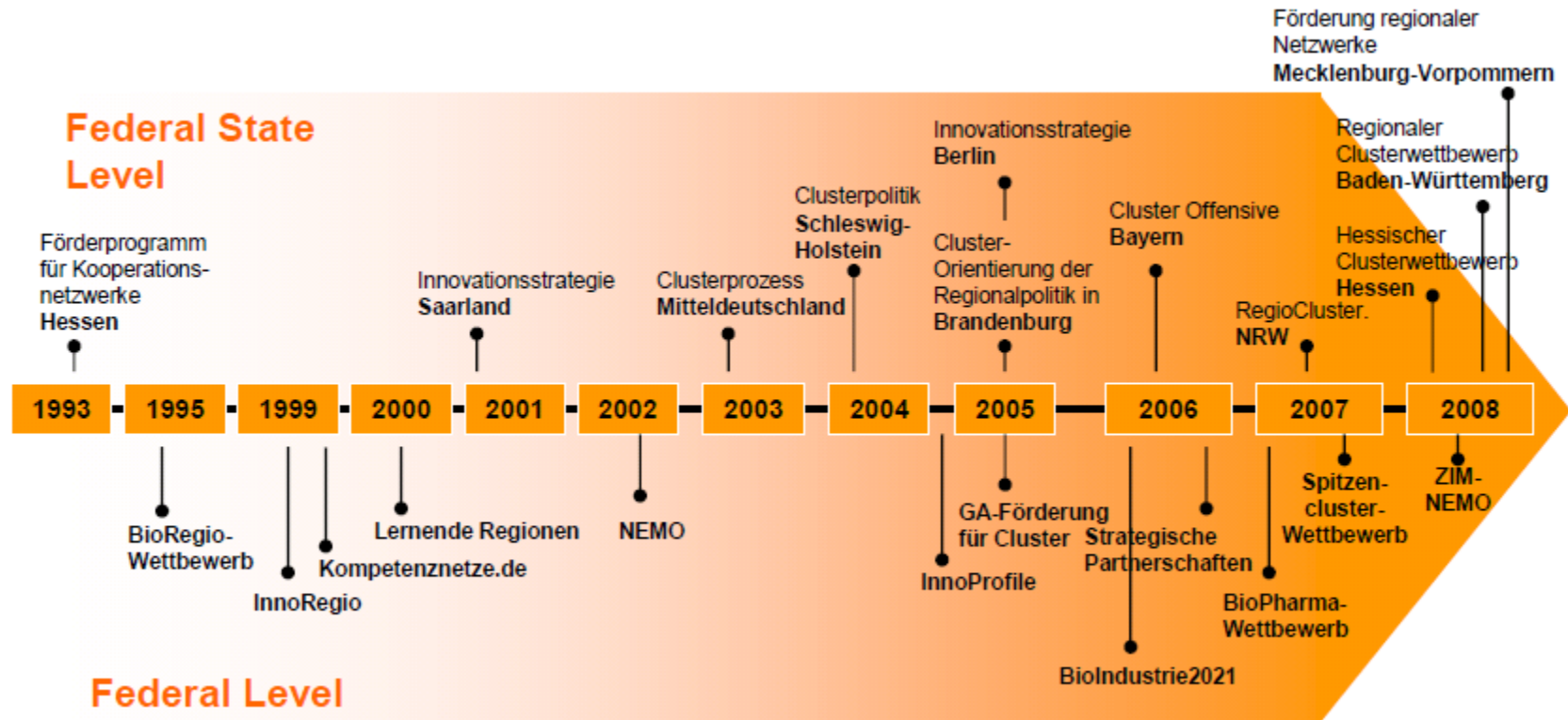
Region(s)	Cluster organisation	Website
Burgenland, Wien, Niederösterreich, Oberösterreich	Automotive Cluster Vienna Region	www.acvr.at
Wallonie	Cluster Auto-Mobilité de Wallonie	www.clusterautomobile.be
Halle	HarBEG Automotive	www.har-beg.de
Kärnten	Cluster Kärnten	www.cluster-karnten.at
Saarland	Automotive Saarland	www.automotive-saarland.de
Denmark	AutoCluster	www.autocluster.com
Paris Île-de-France	ACCIF	www.accif.eu
Galicia	Cluster de Empresas de Automoción de Galicia	www.ceaga.com
Hedmark og Oppland	Automa	www.automa.no
Slovenia	Business Interest Association ACS Automotive Cluster of Slovenia	www.acs-gi.si
Sverige	Automotive Cluster of Sweden	www.automotivecluster.se
Sverige, Småland	Aluminiumskat	www.aluminiumskat.se



- Launched in 2004
- 67 cluster efforts, including **17 globally competitive**, identified in 2005
- 1.6bn Euro public co-funding over the first three years (90% for **R&D**)
- Major **review** in 2008; 13 efforts put on notice for funding to be terminated



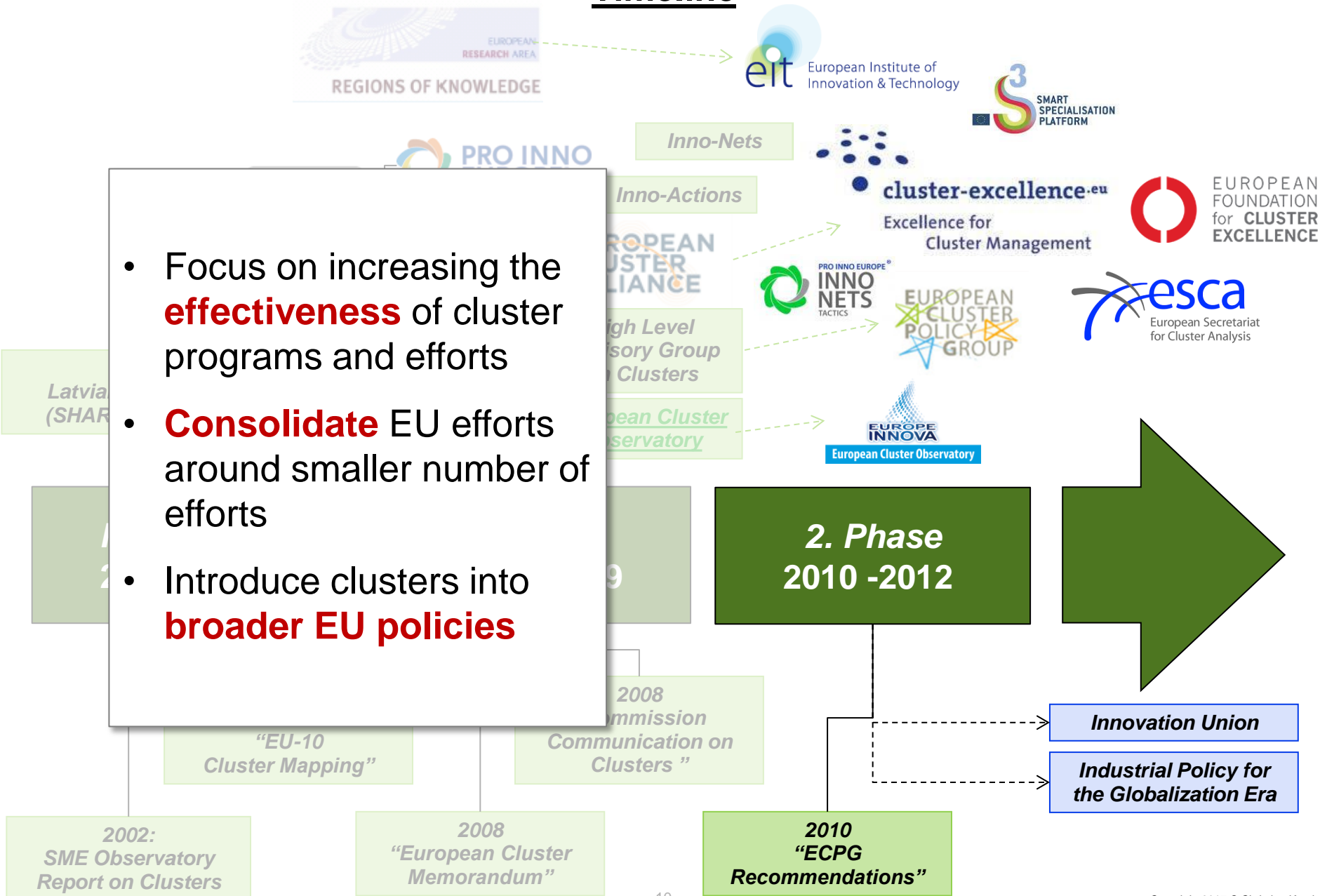
The Evolution of National Cluster Policies Germany



- Reorganization of **innovation and SME policies**
- Reorganization of the role of **regional government**
- Wide use of **competitions**

Cluster Policy in Europe: EU Activities

Timeline



Clusters, Business Environments, and New Sectors



Differentiation of Cluster Policy Support Programs

Norway



NORWEGIAN
INNOVATION
CLUSTERS

GCE (2014-):

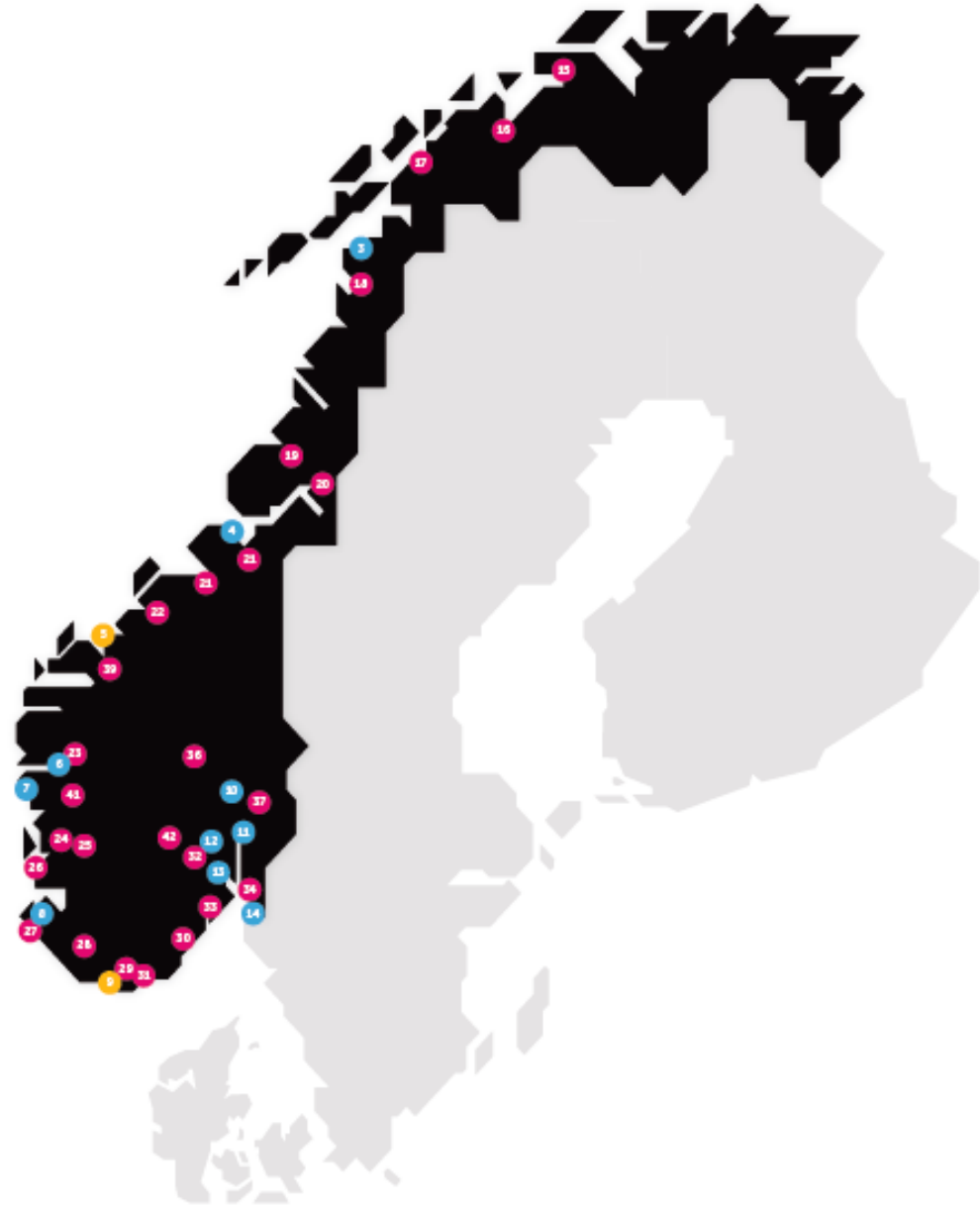
Mature, Global position

NCE (2006-):

Mature, National position

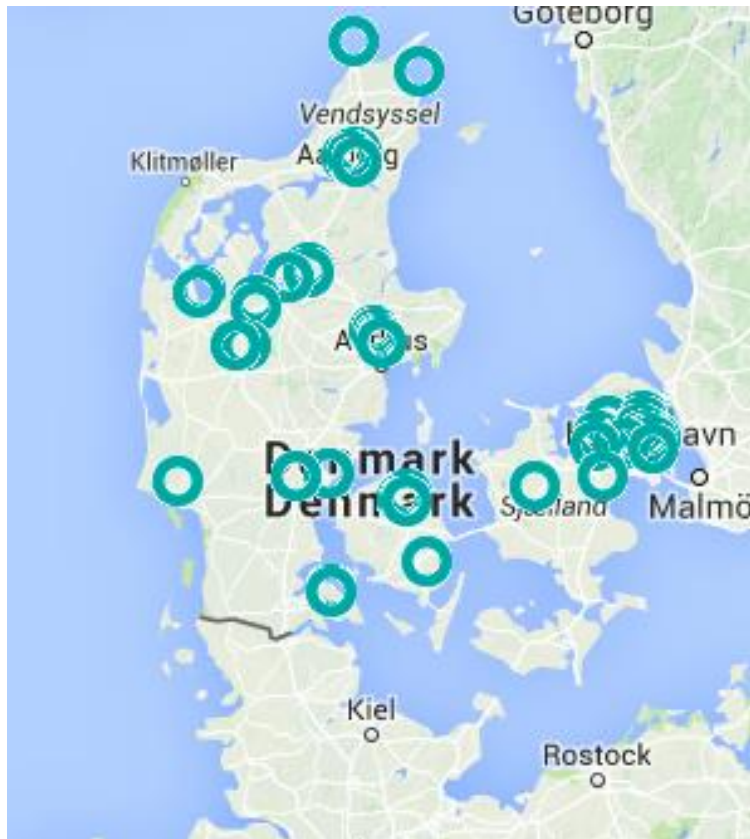
ARENA (2002-):

Immature, Emerging position



Regional Clusters and National Industries

Denmark



Cluster Policy in Europe: EU Activities

Timeline

- Concentration on **emerging industries and clusters**
- **Internationalization** through cluster organizations and matchmaking
- Continued dialogue on the role of clusters in **EU regional policy** and **industrial change**
- Support for **national and regional cluster policies**

2008
"European Cluster
Memorandum"

2010
"ECPG
Recommendations"



EU Cluster Portal and European Cluster Panorama



3000 Strong Clusters in Europe

NUMBER OF STRONG CLUSTERS

46% of traded industry jobs...

...in 20% of...

3 Stars



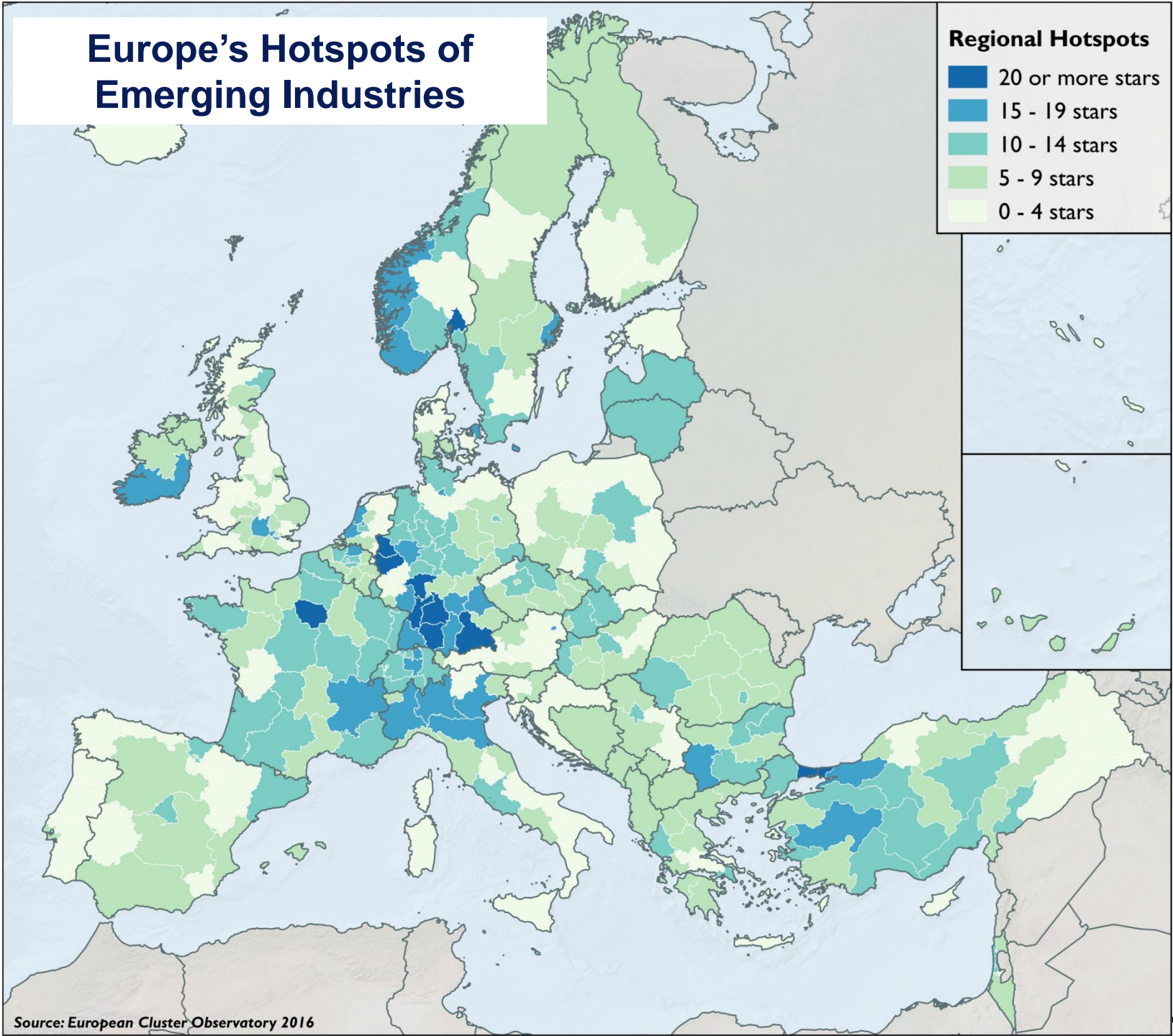
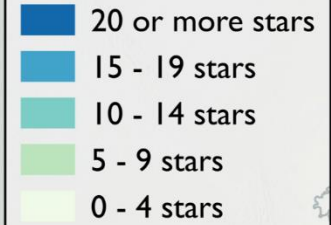
Hotspots of Emerging Industries: Performance Differences



Internal Market,
Industry,
Entrepreneurship
and SMEs

Europe's Hotspots of Emerging Industries

Regional Hotspots

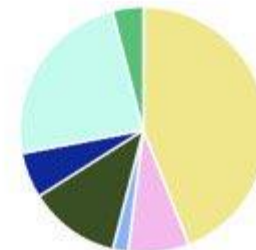


Clusters and Smart Specialization



In the research and innovation ecosystem, who is the most important actor?

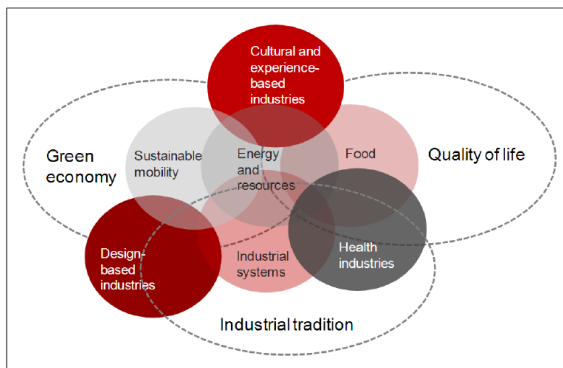
Clusters	44%
Research centres	8%
HEI	2%
Technology transfer organisation	12%
Venture capital	6%
Business association	0%
Incubators / accelerators	24%
Student associations	4%



#PolicyLearning

#ResearchInnovation

19 October 2017, Milan, Italy



The Role of the European Commission

A Few Reflections

WHAT

- Data
- Platform for learning
- Linkages
- Energy
- Credibility
- Challenges
- NOT: European cluster program

HOW

- Benchmarking when one size doesn't fit all
- Pilots when roll-out is far from automatic
- Analysis when the answer is not what you want
- Policy advice when the solutions do not yet exist
- Providing leadership when you are not the expert

Looking Forward

- From policy for clusters to **policy through clusters**
- From strengthening strengths to **building new capabilities**
- From benchmarking to **context-aligned policies and organizations**
- From **local clusters** to **regional strategies, embedded in national policies**