SETTING THE STAGE : CLUSTER POLICIES

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OECD
BETTER POLICIES FOR BETTER LIVES
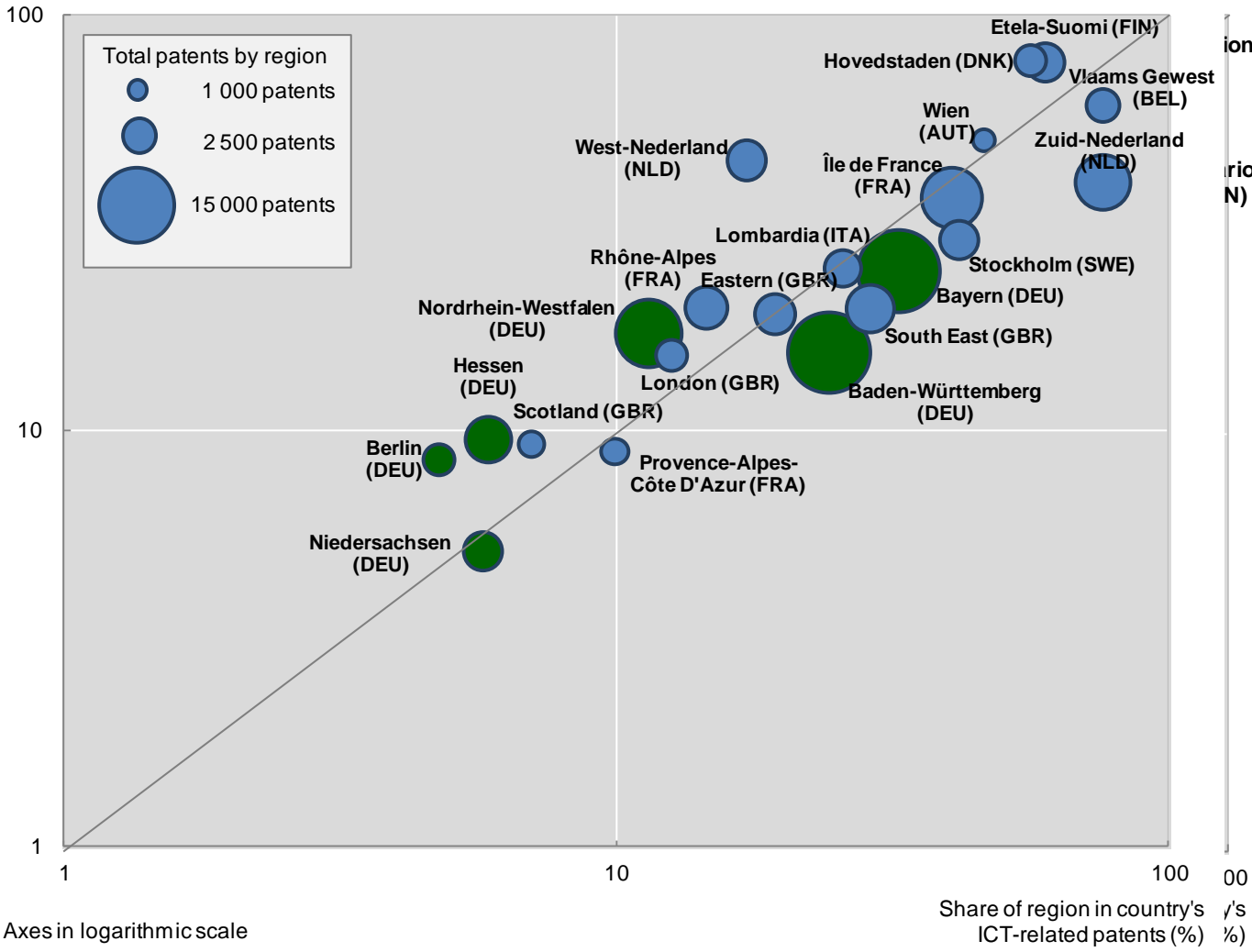
Why focus on clusters?

- Everyone wants their Silicon Valley Cluster

- But what makes "Silicon" work ?

- Can we repeat that with Graphene or Synthetic Biology?

- Can we shorten the time it takes to foster new industries? (accelerate transitions)

Innovation hotspots

Innovation hotspots in ICT, biotechnologies and nanotechnologies, 2006-08

Share of region in country's biotechnology and nanotechnology patents (%)

Total patents by region
- 1 000 patents
- 2 500 patents
- 15 000 patents

Etela-Suomi (FIN)
Hovedstaden (DNK)
Vlaams Gewest (BEL)
Wien (AUT)
West-Nederland (NLD)
Zuid-Nederland (NLD)
Île de France (FRA)
Lombardia (ITA)
Rhône-Alpes (FRA)
Eastern (GBR)
Stockholm (SWE)
Nordrhein-Westfalen (DEU)
Bayern (DEU)
South East (GBR)
Hessen (DEU)
London (GBR)
Baden-Württemberg (DEU)
Scotland (GBR)
Berlin (DEU)
Provence-Alpes-Côte D'Azur (FRA)
Niedersachsen (DEU)

Axes in logarithmic scale

Share of region in country's ICT-related patents (%)

Source: OECD STI Scoreboard 2011 based on OECD, REGPAT Database.

National innovation policies increasing focus on collaboration

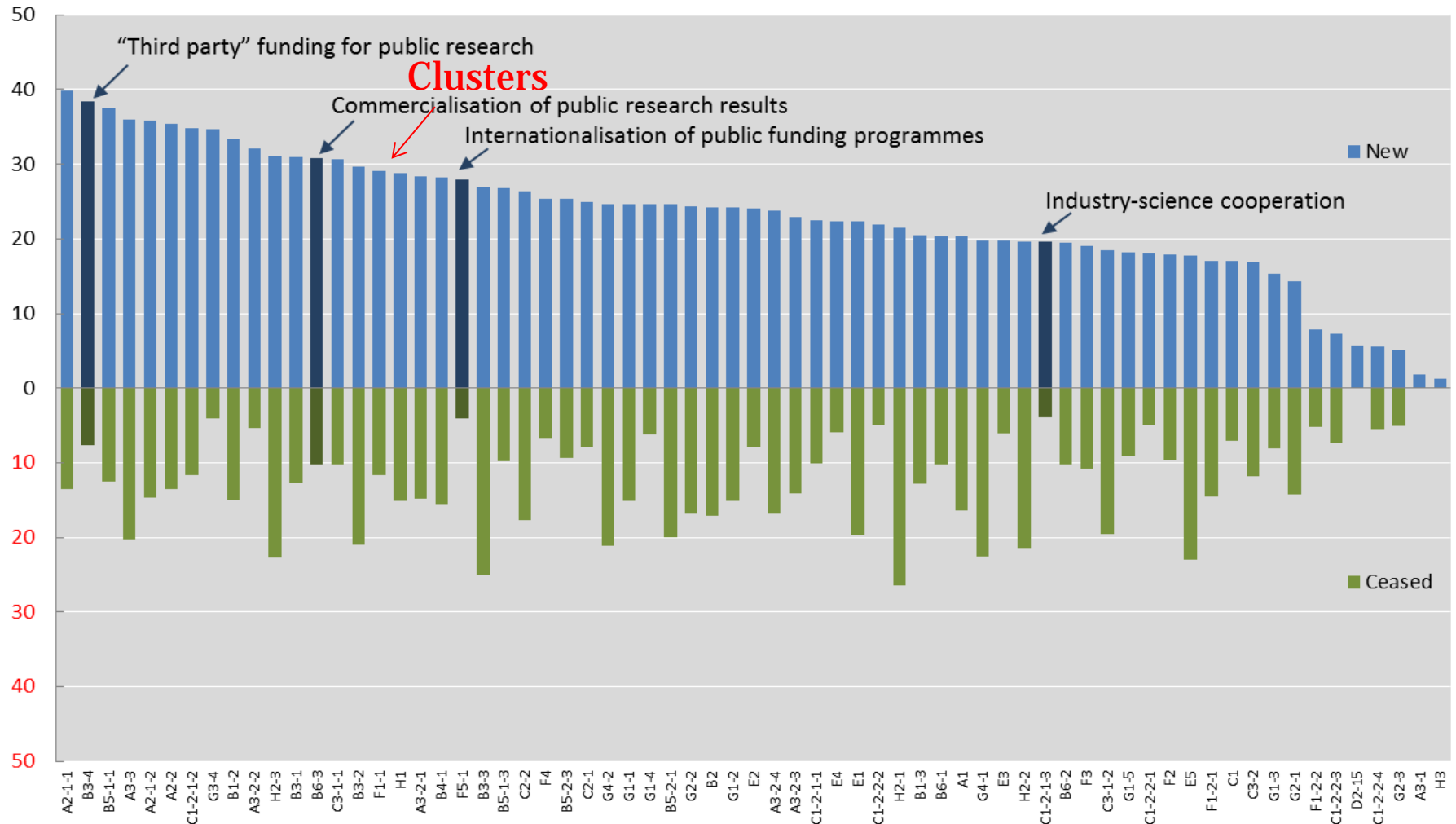Major areas of changes in national STI policies, 2016
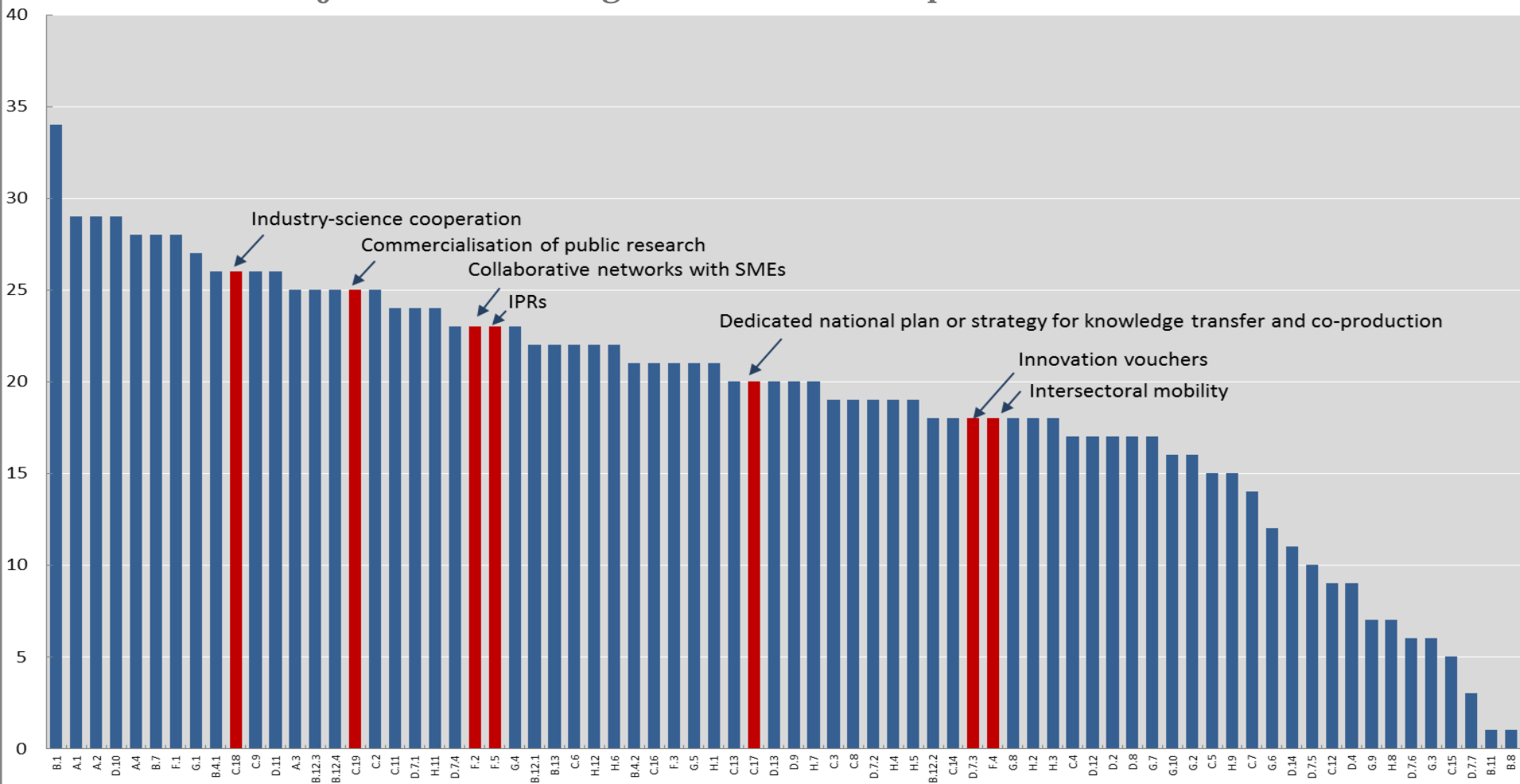
Source: EC/OECD STI Policy Survey 2016 (preliminary).

Changing policy mix

Churning rate in the policy mix, 2016
% of total policy initiatives, all countries

Source: EC/OECD STI Policy Survey 2016 (preliminary).

Where do cluster policy fit in this changing context ?

- **Regional Policy?**
- **"New" Industrial Policy?**
- **Next production revolution?**
- **Place-based economic development?**
- **Global/local value chains?**

Clusters and Smart Specialisation: One and the Same?

- In smart specialisation, firm entry' is desirable to generate agglomeration externalities (clusters) and a diversity of innovators (large and small)

- In this scenario growth is endogenous as externalities and spillover effects lead to growth

- Implicit is the incentives for entrepreneurship and innovation (R&D, education, technology).

Structural change through clusters

- Start up dynamics (high start up rates but slow growth for avg firms)
- New enabling technologies as distruptors – role of public research
- Business model innovation
- Bottom up versus top down incentives for change
- Policy co-ordination (national, regional, local)
- Longer -term needs and short-term political agendas

Conditions that affect the landscape for clusters include:

- Institutions (HEIs, PROs)
- Framework policies
- Technological attributes /infrastructure
- Demand factors
- Economies of scale and product life cycles
- Market dynamics
- Industrial policies

In almost all government can play a role!

What is the new paradigm ?

- **Openness in Innovation Clusters**
- **Aligning the policy mix**
- **Need for new forms of financing and public intervention**

Key element: Openness

- Building extra-regional connections is key
- Importance of cross-border flows of knowledge and spill-overs
- Involvement of multinationals and local SMEs (think global, act local phenomenon)
- Internationalisation of clusters, innovation networks

Lets discuss!