

Forskningsklustret Stockholm-Uppsala i ett Europeiskt perspektiv



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Göran Lindqvist
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**Stockholm School of Economics
Center for Strategy and Competitiveness**

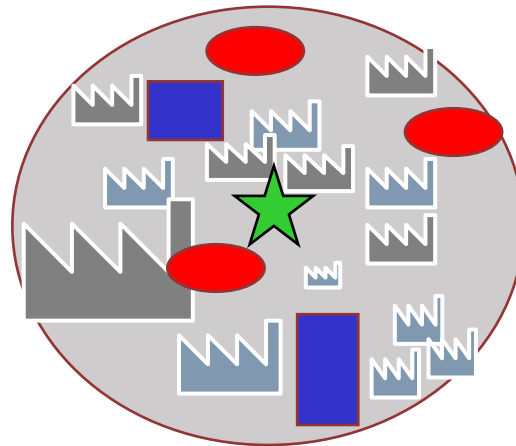
Data: Europe INNOVA Cluster Mapping



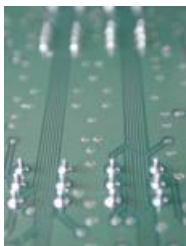
Globala Marknader



Lokala Kluster



BOLLYWOOD



A TALE OF TWO LABELS

Even a beer hani can understand that this popular well priced Australian white wine (\$10) features the Chardonnay white wine grape.
 This French wine (\$50) also is 100% Chardonnay- but only a connoisseur would know that Champs Cavey is a small piece of land located above a Burgundy village where local **appellation controllee** rules permit cultivating only Chardonnay. Even better, it would be best to check out Domaine La Fleur in a wine rating book, since a doctrine of producers and merchants sell expensive Pinotys.
 Montsachels that range from the sublime to the sub-standard

Data: Businessweek ©/W



Kluster

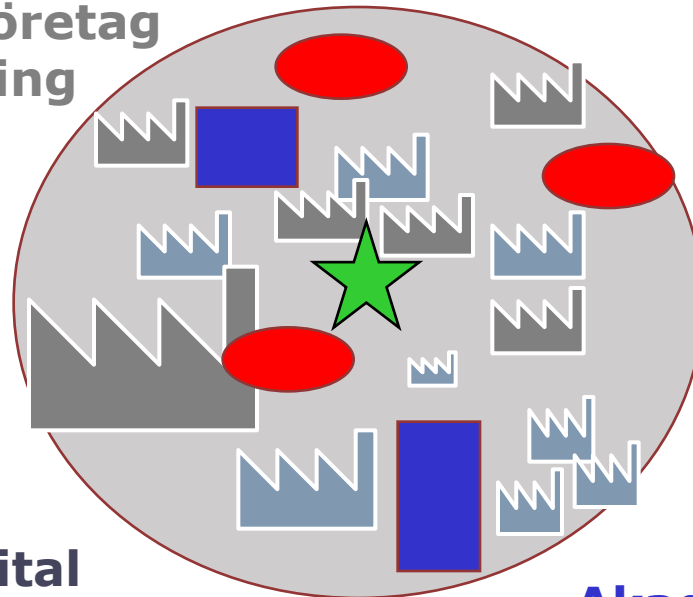
Lokalt/regionalt länkade företag och organisationer

Näringsliv:

- Konkurrenter
- Kunder/leverantörer
- Storföretag/småföretag
- Tjänster/tillverkning

Offentliga:

- Stat/kommun
- Näringslivskontor



Samarbets- organisationer:

- Klusterinitiativ
- Nätverk
- Kvalitetsinstitut
- Handelskammare

Finans:

- Banker
- Venture Capital
- Affärsänglar

Akademi:

- Universitet
- Högskolor
- Laboratorier

Böhler-Uddeholm
Precision Strip

Broby Grafiska
Miller Graphics
Mondi Packaging
Rottneros
Rockhammar
Tetra Pak Packaging

Billerud Gruvön

Åmotfors Bruk

Nordic Paper Seffle
BTG P&P Sensors
UMW Coating
Svanskogs mill
Satron Instruments

Duni AB
Smurfit Munksjö AB

Arctic Paper
Håfreströms Mill

Wermland Paper
Bäckhammars Bruk
Coveright Sweden

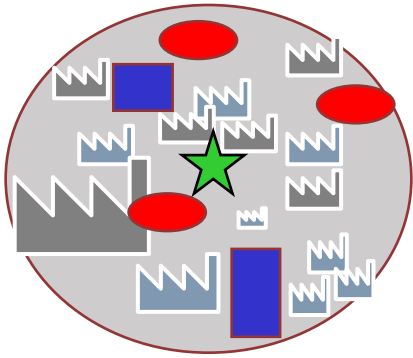


Karlstad

Benima Mellan
 Designstudio Värmland
 Etteplan Industriteknik
 FB Engineering
 Emerson Process
 Jaakko Pöyry
 Karlstads universitet
 KPA i Karlstad
 Kvaerner Kamfab
 Kvaerner Pulping
 Megamet
 Metso Paper Karlstad
 Navo
 PQ Sweden
 Profomo Ingenjör
 Project Engineering
 Pulp&Paper Consultants
 Rejlers Ingenjörer
 Semcon Sweden
 Siemens Industrial Services
 Skanark Arkitektbyrå
 Stora Enso Research Centre
 Metallindustriarbetarförbundet
 SWECO PIC
 The Packaging Greenhouse
 VA-Ingenjörerna
 Voith Paper
 VSV Frakt
 WermTec Industriteknik
 WM-data Caran
 WTC Teknik Holding AB
 ÅF-Celpap

Stora Enso Skoghalls Mill
 Hammarö Svetsteknik
 Noviant
 Akzo Nobel Base Chemicals
 Rottneros-Rockhammar AB
 Assi Domän Frövi Mill

Källa: Paper Province



300 företag i länkade branscher

11 pappers- och massabruk

6 forskningscenter

2 universitet

1 grafiskt center för packaging

1 design studio

2 klusterorganisationer

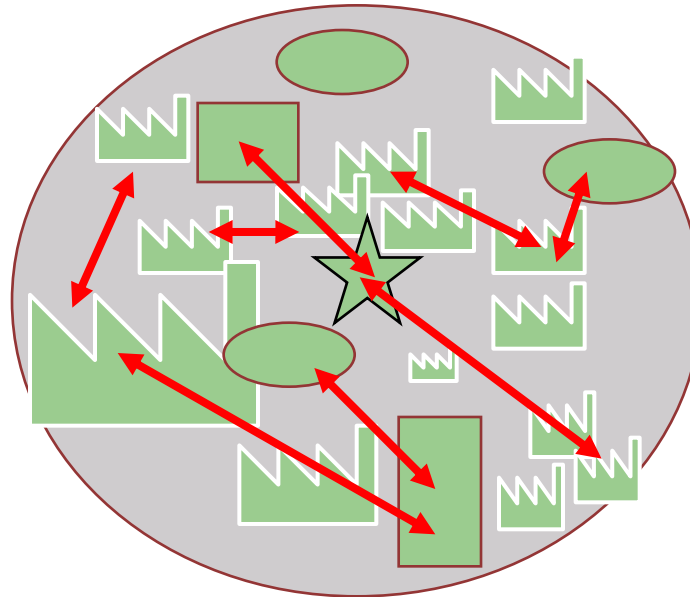
13 miljarder nettoexport

40% av förpackningspapper i Sverige



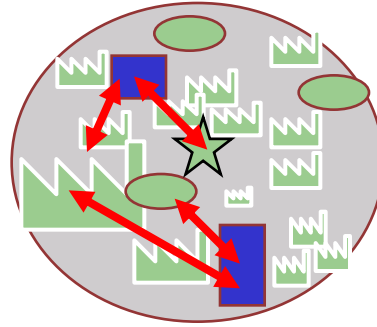
Källa: Paper Province. Karlstad.

Klusterdynamik



- **Konkurrensklimat**
- **Informella nätverk (föreningar, klubbar ...)**
- **Socialt kapital**
- **Formella samarbeten (kund-lev, universitet-näringsliv ...)**
- **Institutionellt ramverk (regler, normer ...)**

Universitet - Näringslivsdynamik

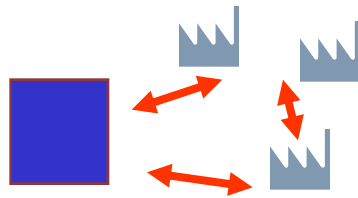


- 1. Institutionellt ramverk (regler, normer)**
- 2. Incitament för forskare att kommersialisera forskningen**
- 3. Infrastruktur för att kommersialisera forskningen (inkubatorer, tech transfer kontor, konsulter, samfinansiering etc.)**
- 4. Mobilitet mellan akademi och näringsliv**
- 5. Nätverk och fora (Uppsala Bio pub etc.)**
- 6. Utbildningsprogram**
- 7. Universitetsorganisation (professurer, IPR regler, laboratorier, applicerad forskning etc.)**
- 8. Finansiering (VC-fonder, lokala nätverk för affärsänglar etc.)**

Universitet – Näringslivsdynamik

två olika institutionella system

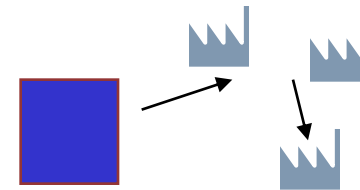
USA



**5 Biotech företag
(3 med patent)**

**10
börsnoterade
Biotech företag**

Frankrike



**1 Biotech företag
(1 med patent)**

**1
börsnoterat
Biotech företag**

**Samma
resurs-
mängd**



Research and Education Clusters in Europe

Cluster Size




Specialisation

Regional Focus

Top-20 Research and Education Clusters by Size

Country	NUTS2	Region Name	Size
France	FR10	Île de France	141 837
United Kingdom	UKI1	Inner London	115 126
Italy	ITC4	Lombardia	71 333
Denmark	DK00	Danmark	69 373
Germany	DE30	Berlin	65 969
Spain	ES51	Cataluña	64 251
Spain	ES30	Madrid	63 918
United Kingdom	UKJ1	Berks, Bucks and Oxon	61 248
Poland	PL12	Mazowieckie	59 795
Italy	ITE4	Lazio	56 642
Germany	DE21	Oberbayern	52 088
Netherlands	NL33	Zuid-Holland	51 169
France	FR71	Rhône-Alpes	50 025
Spain	ES61	Andalucía	48 536
Germany	DEA2	Köln	46 927
Sweden	SE01	Stockholm	44 919
Hungary	HU10	Kozep-Magyarország	44 198
Latvia	LV00	Latvija	43 595
Finland	FI18	Etelä-Suomi	43 590
United Kingdom	UKI2	Outer London	43 372

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3-star Research and Education Clusters



United Kingdom
Berks, Bucks and Oxon
Eastern Scotland
Inner London

Netherlands
Utrecht

Sweden
Stockholm

Latvia
Latvia

Germany
Berlin

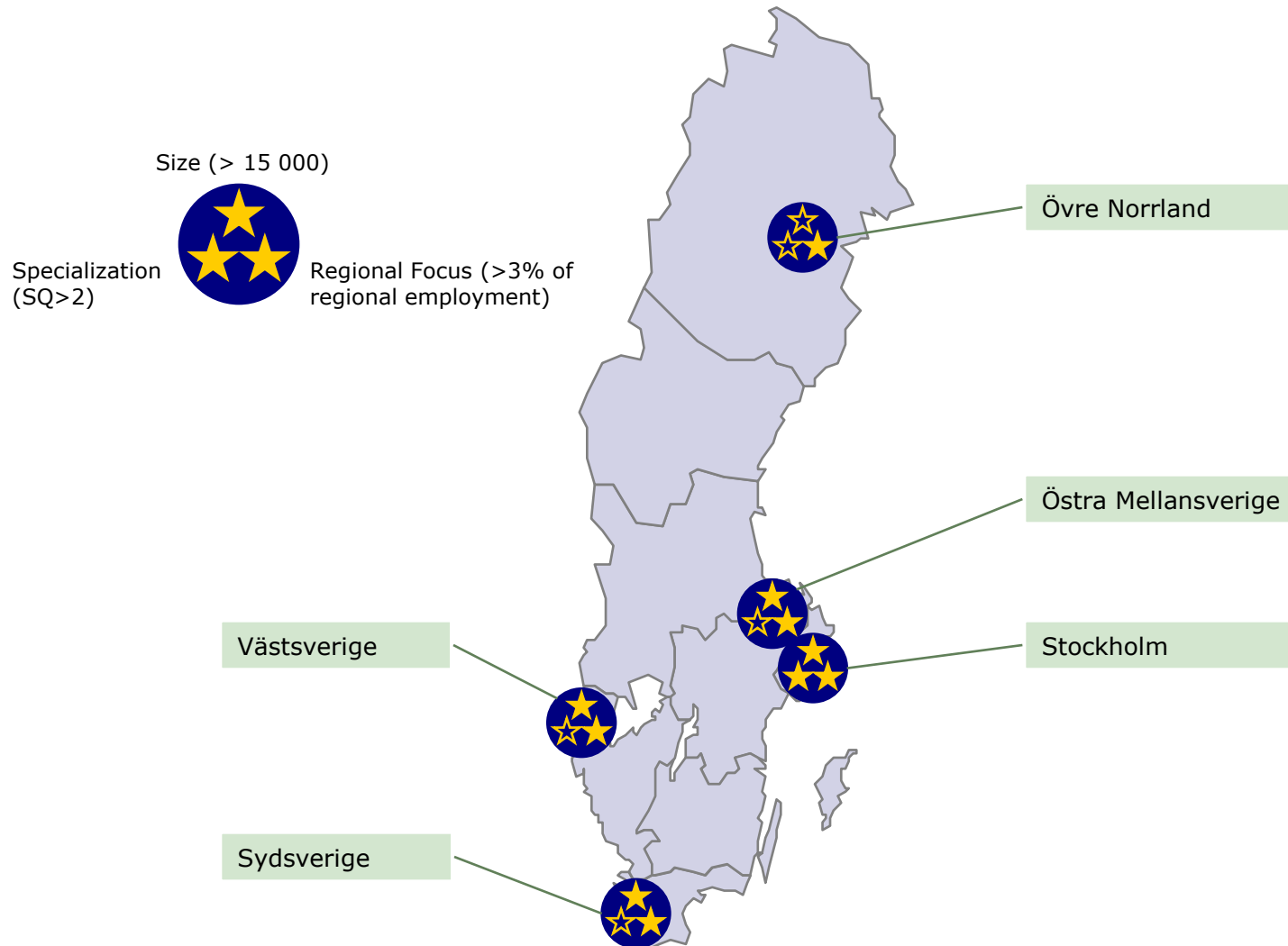
Stockholm is one out of seven 3-star clusters!

Research and Education Clusters Per Country

Country	3-star	2-star	1-star	Stars/Reg
Latvia	1			3.00
Lithuania		1		2.00
Estonia		1		2.00
United Kingdom	3	18	7	1.41
Sweden	1	3	1	1.25
Netherlands	1	4	1	1.00
Switzerland		3	1	1.00
Belgium			3	1.00
Denmark			1	1.00
Iceland			1	1.00
Slovenia			1	1.00
Finland		1	1	0.60
Norway		2		0.57
Germany	1	3	14	0.56
Poland		2	5	0.56

Country	3-star	2-star	1-star	Stars/Reg
Slovakia		1		0.50
Italy			9	0.43
France		1	7	0.41
Czech Republic		1	1	0.38
Portugal			2	0.33
Spain			6	0.32
Hungary		1		0.29
Romania		1		0.25
Austria			1	0.11
Greece			1	0.08
Luxembourg				0.00
Malta				0.00
Cyprus				0.00
Turkey				0.00
TOTAL	7	43	63	0.62

Research and Education Clusters in Sweden



Cluster Dynamics

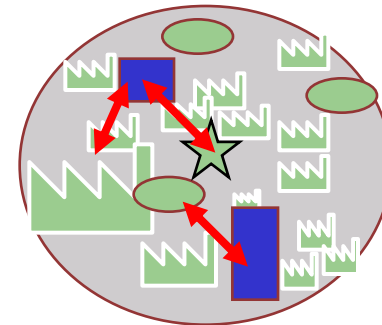
Clusters Around Stockholm and Uppsala

Stockholm

Cluster	Stars
Education	***
Information Technology	***
Business Services	**
Financial Services	**
Transport and Logistics	**
Analytical Instruments	*
Heavy Construction Services	*
Hospitality and Tourism	*
Biopharmaceuticals	*
Entertainment	*

Östra Mellansverige

Cluster	Stars
Metal Manufacturing	***
Education	**
Transport and Logistics	**
Aerospace Vehicles and Defense	*
Heavy Construction Services	*
Lighting and Electrical Equipment	*



Cluster Dynamics

Clusters Organisations in Göteborg

Intelligent Vehicle Safety Systems - IVSS:

Saab
Volvo
Volvo Cars
Scania
Vägverket
Scandinavian Auto.
Suppliers
ISA
Vinnova

Crash Safety - SAFER:

Chalmers
Vinnova
Industry

