

Enheten för regional tillväxt
Maja Sörensen
europeanoffice@regionvarmland.se

ANNEX

Pilot project on industrial transition

Material on the region Norra Mellansverige used for the peer learning workshops organized by the European Commission and OECD spring 2018

Contents

Workshop 2: Broadening innovation and innovation diffusion	3
Workshop 3: Low-carbon energy transition	12
Workshop 4: Promoting entrepreneurship and mobilising the private sector	19
Workshop 5: Inclusive growth.....	25

Workshop 2: Broadening innovation and innovation diffusion

Annex 1 – European Commission 2017a

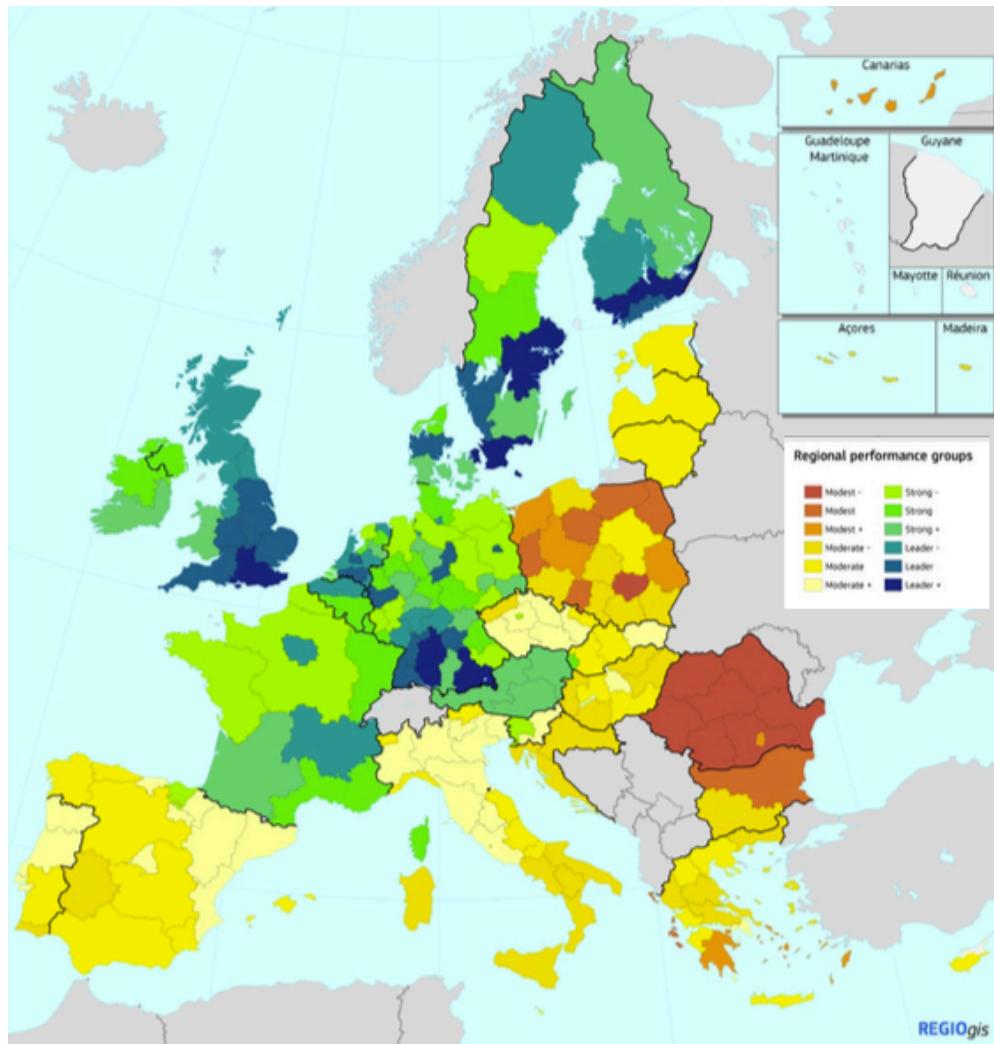


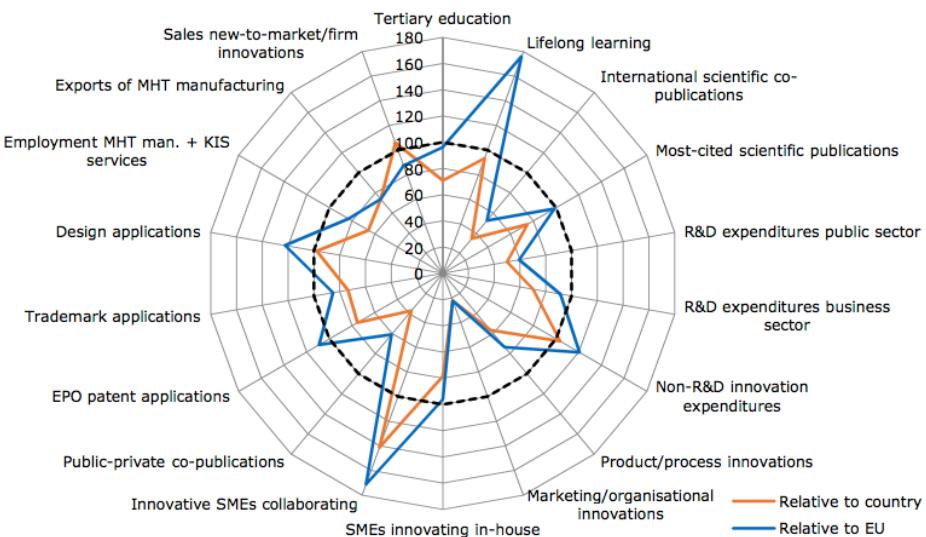
Figure 1: The Regional Innovation Scoreboard Index 2017

Norra Mellansverige (SE31)

	Data	Norm	Relative to	
		alised score	SE	EU
Tertiary education	37.5	0.530	71	96
Lifelong learning	26.2	0.828	93	176
International scientific co-publications	309	0.219	34	52
Most-cited scientific publications	8.0	0.538	75	99
R&D expenditures public sector	0.26	0.324	50	59
R&D expenditures business sector	1.10	0.416	70	91
Non-R&D innovation expenditures	±	0.362	±	±
Product/process innovations	±	0.328	±	±
Marketing/ org. innovations	±	0.087	±	±
SMEs innovating in-house	±	0.439	±	±
Innovative SMEs collaborating	±	0.613	±	±
Public-private co-publications	40.8	0.181	37	61
EPO patent applications	5.16	0.425	75	109
Trademark applications	4.28	0.335	74	85
Design applications	1.68	0.638	98	122
Employment MHT manuf./KIS services	12.4	0.444	66	83
Exports of MHT manufacturing	40.2	0.467	74	74
Sales new-to-market/firm innovations	±	0.410	±	±
Average score	--	0.421	--	--
Country EIS-RIS correction factor	--	1.107	--	--
Regional Innovation Index 2017	--	0.466	--	--
RII 2017 (same year)	--	--	72.9	102.7
RII 2017 (cf. to EU 2011)	--	--	--	105.4
Regional Innovation Index 2011	--	0.431	--	--
RII 2011 (same year)	--	--	69.0	97.5
RII - change between 2011 and 2017	--	7.9	--	--

± Relative-to-EU scores are not shown as these would allow recalculating confidential regional CIS data.

Figure 2: Norra Mellansverige's normalized scores per indicator and relative results compared to Sweden and the EU. The table also shows the RII in 2017 compared to Sweden and the EU in 2017, the RII in 2017 compared to that of the EU in 2011, and performance



change over time.

Figure 3: Norra Mellansverige's relative strengths compared to Sweden and the EU

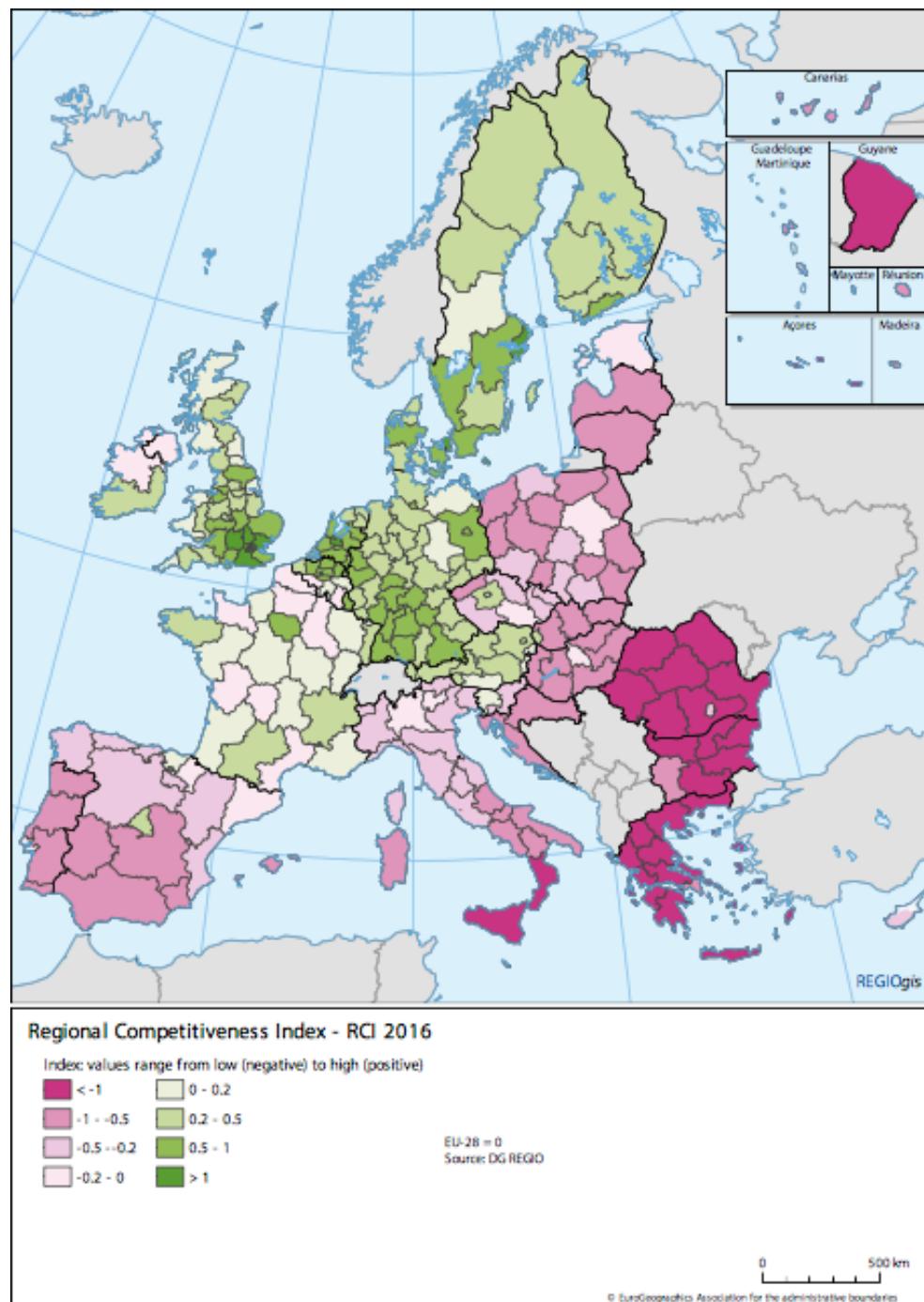
Annex 2 – European Commission 2017b**Map 1: RCI 2016 scores (z-scores, EU-28 = 0)**

Figure 4: EU Regional Competitiveness Index 2016

	Score	Rank		Score	Rank		Score	Rank	
	0-100			0-100			0-100		
Basic dimension	86.0	51/263		Efficiency dimension	66.6	117/263	Innovation dimension	49.5	142/263
Institutions	79.5	14/263		Higher Education and lifelong learning	76.6	37/263	Technological Readiness	83.6	99/263
Macroeconomic Stability	85.8	2/28		Labour Market Efficiency	78.2	52/263	Business Sophistication	20.9	209/263
Infrastructure	36.33	118/263		Market Size	13.4	214/263	Innovation	45.5	100/263
Health	89.6	23/263							
Basic Education	65.6	14/28							

Figure 5: The ranking of Norra Mellansverige

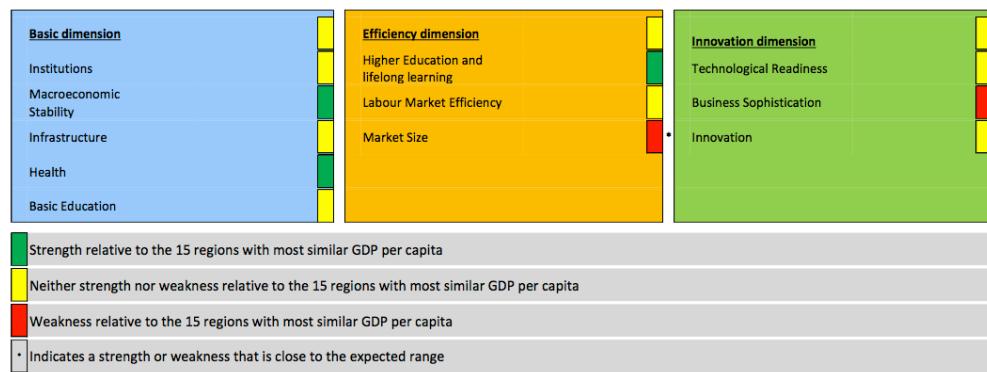


Figure 6: The strengths, neither strengths nor weaknesses and weaknesses relative to the 15 regions with most similar GDP per capita

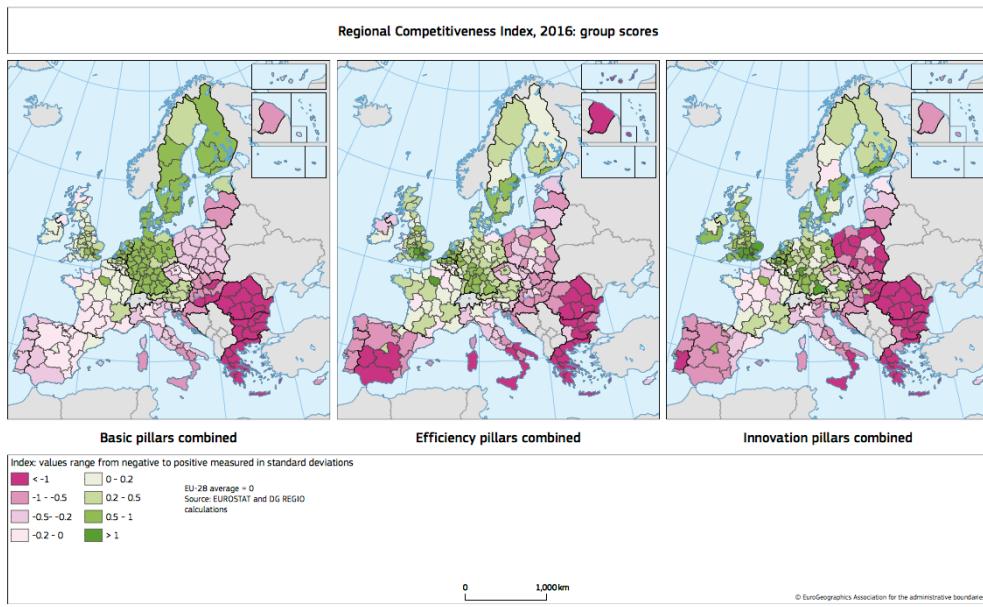


Figure 7: EU Regional Competitiveness Index 2016 divided into three different groups

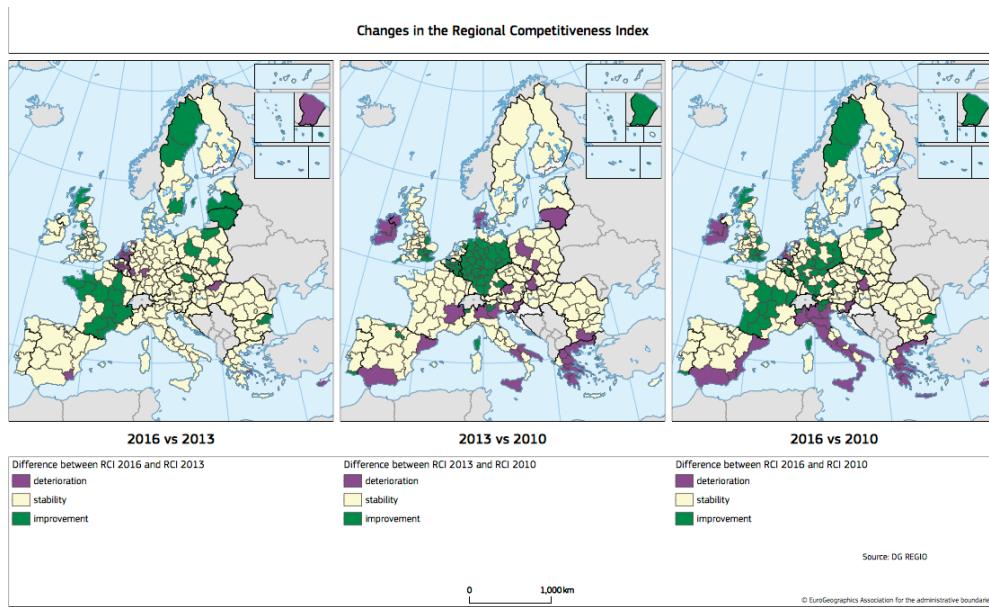


Figure 8: Changes in EU Regional Competitiveness Index between different years

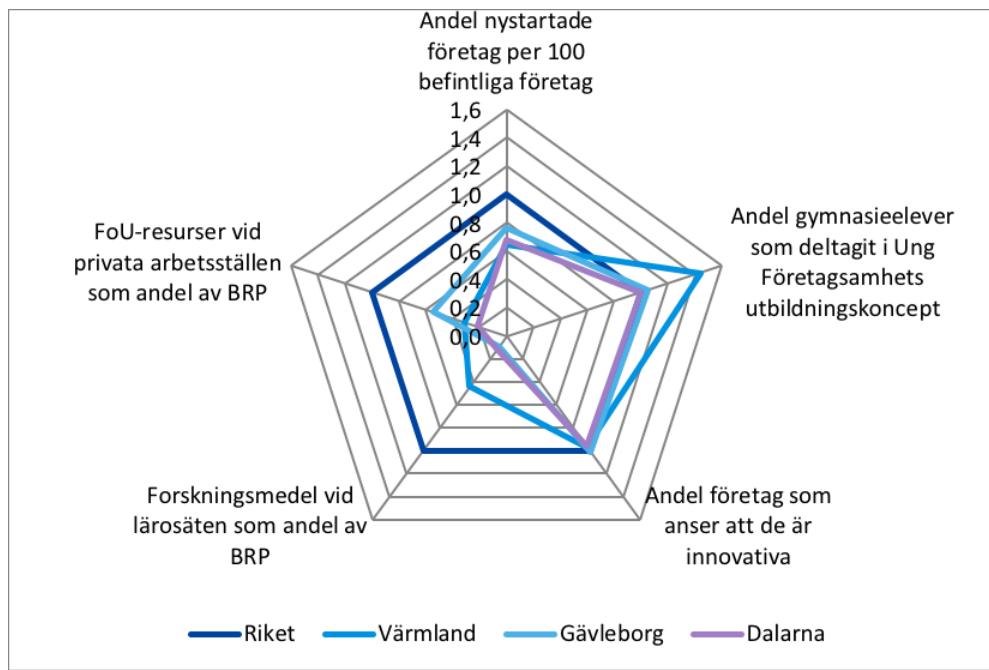
Annex 3- Kontigo 2012

Figure 9: Indicators on renewal ability for Värmland, Gävleborg and Dalarna relative to Sweden

Annex 4 – Nordregio 2018

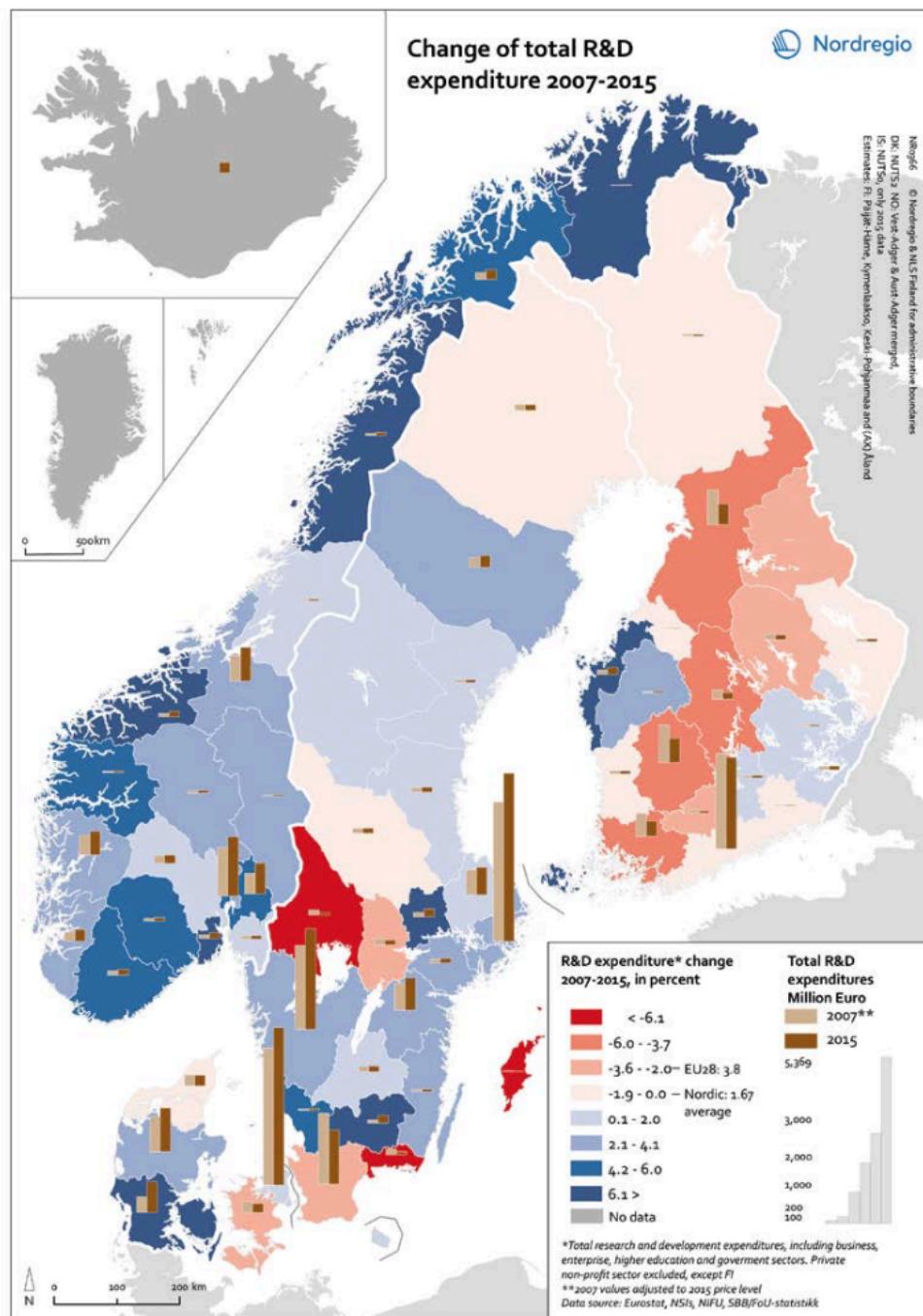


Figure 9.3 Total R&D expenditure changes 2007–2015.

Figure 10: Changes of R&D expenditure

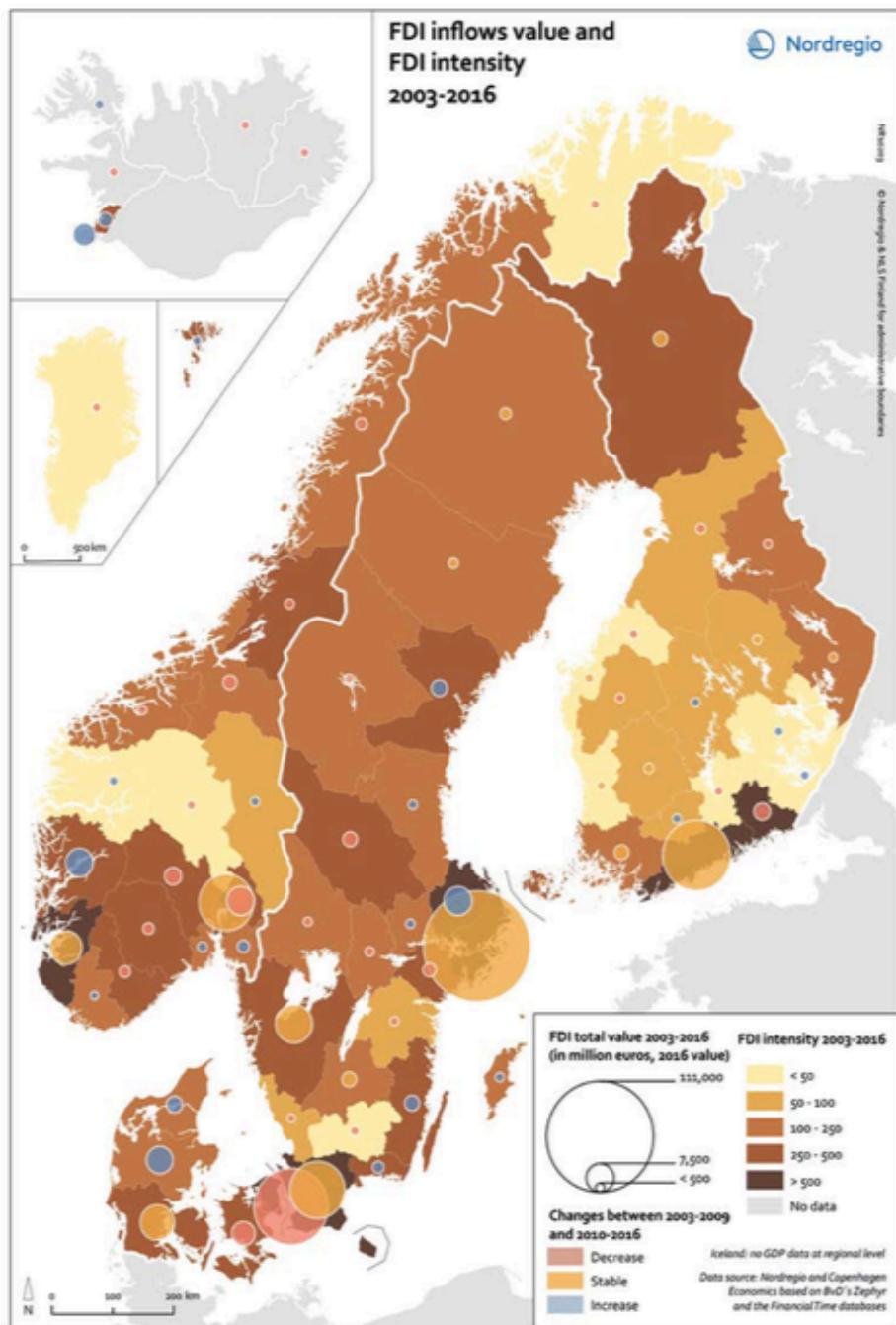


Figure 10.5 FDI inflows value and FDI intensity 2003-2016.

Figure 11: FDI inflows value and FDI intensity 2003-2016

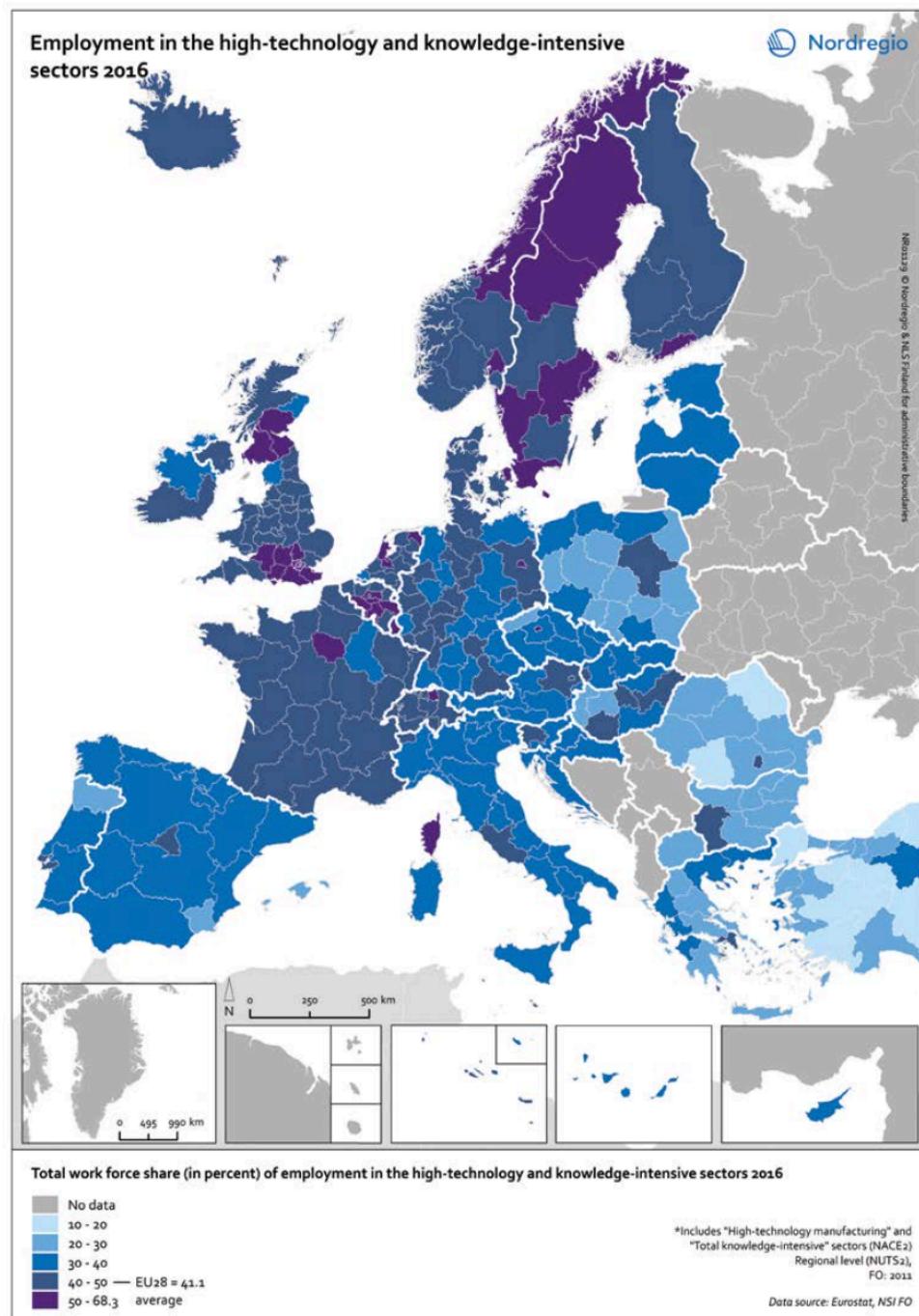


Figure 9.4 Employment in high-technology and knowledge-intensive sectors 2016.

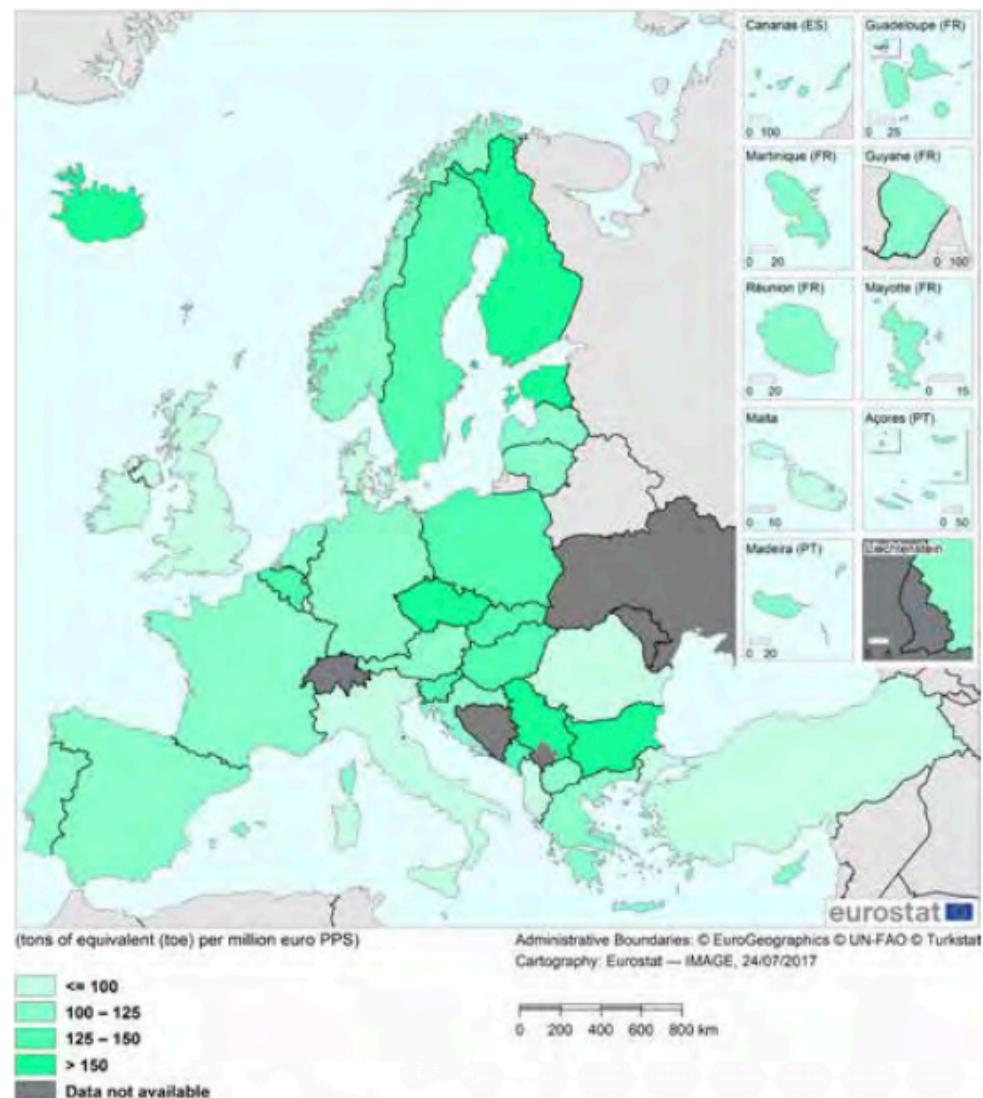
Figure 12: Employment in the high-technology and knowledge- intensive sectors 2016

Workshop 3: Low-carbon energy transition

Annex 1- Eurostat 2017b

Map 2.7.1: Energy consumption per GDP, 2015

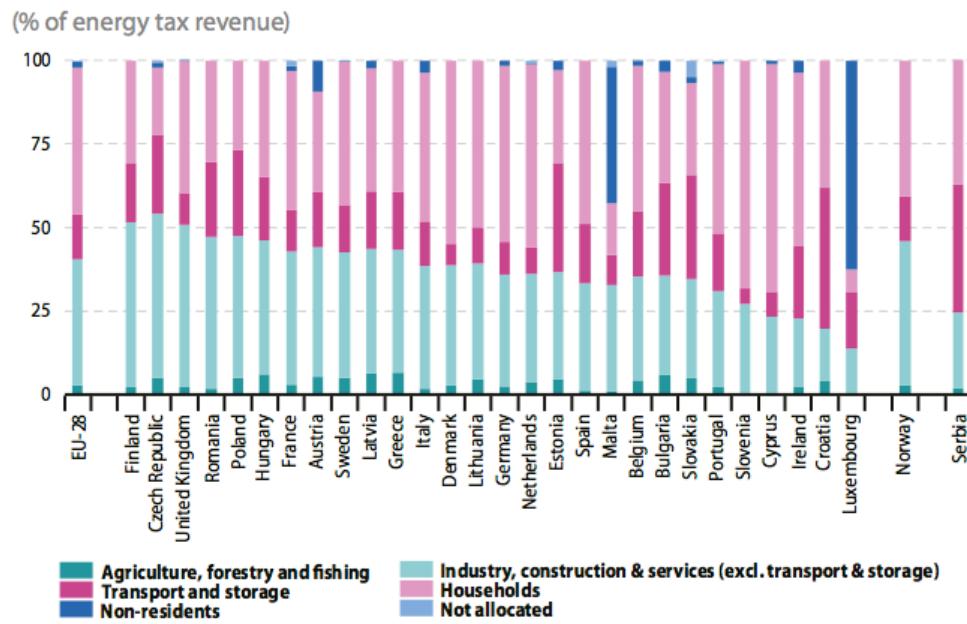
(toe/million euro PPS)



Gross inland energy consumption of all energy products per Gross Domestic Product at current market prices, using purchasing power standards.

Source: Eurostat (online data codes: nrg_100a and nama_10_gdp)

Figure 1: Energy consumption per GDP 2015 toe per million euro PPS

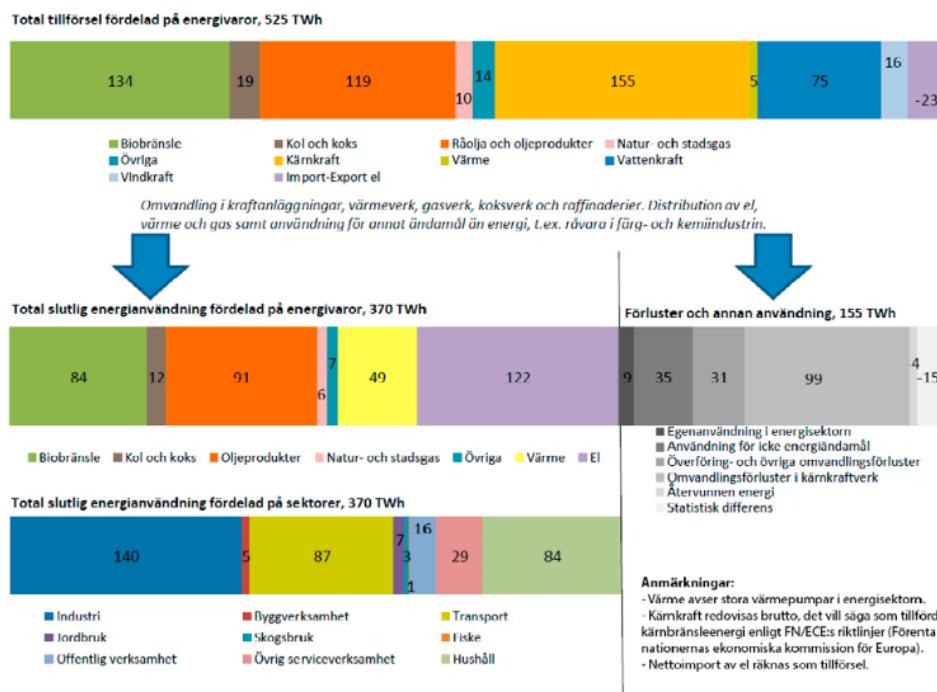
Figure 4.9.2: Energy taxes by economic activity, 2014

Note: ranked on the share of environmental taxes paid by businesses (agriculture, forestry, fishing, industry, construction, services, transport and storage).

Source: Eurostat (online data code: env_ac_taxind2)

Figure 2: Energy taxes by economic activity

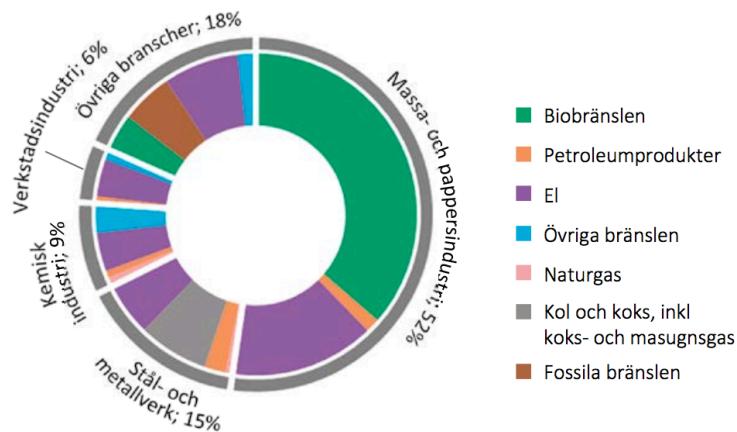
Annex 2 – Energimyndigheten 2017



Figur 1 Energitillförsel och energianvändning i Sverige år 2015, TWh.

Källa: Energimyndigheten.

Figure 3: Energy supply and energy consumption in Sweden 2015



Figur 11 Industrisektorns slutliga energianvändning per bransch och energibärare 2015, procent.

Källa: Energimyndigheten.

Anm: För övriga branscher redovisas användningen av naturgas, kol och koks samt petroleumprodukter som fossila bränslen. Den energianvändning per energibärare och bransch som understiger 1 TWh visas inte i diagrammet.²⁰

Figure 4: Energy consumption in the industry sector 2015

Annex 3 – Nordregio 2016

Figure 11.13: Nordic Renewable energy potential

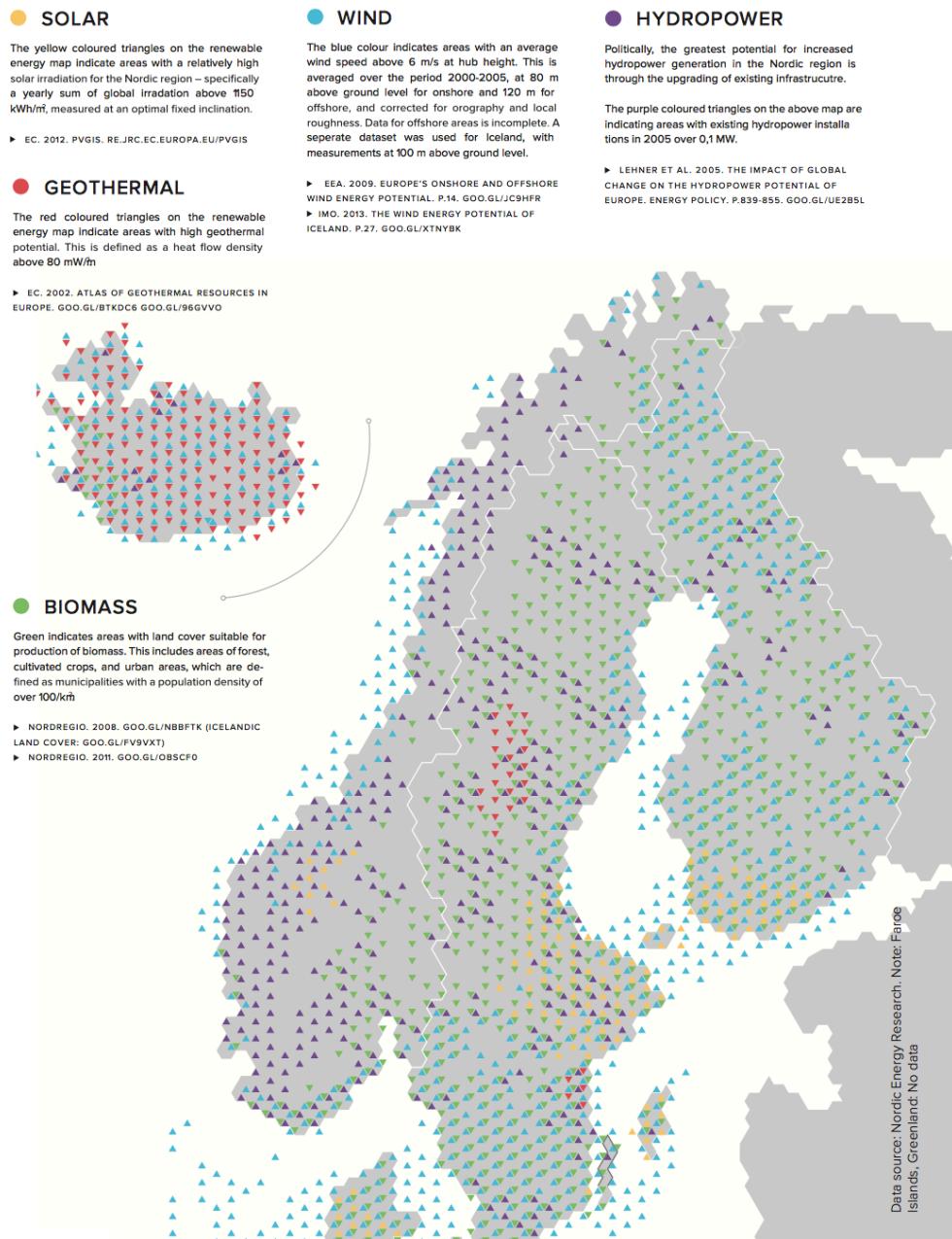


Figure 5: Nordic Renewable energy potential

Annex 4- Länsstyrelserna 2015

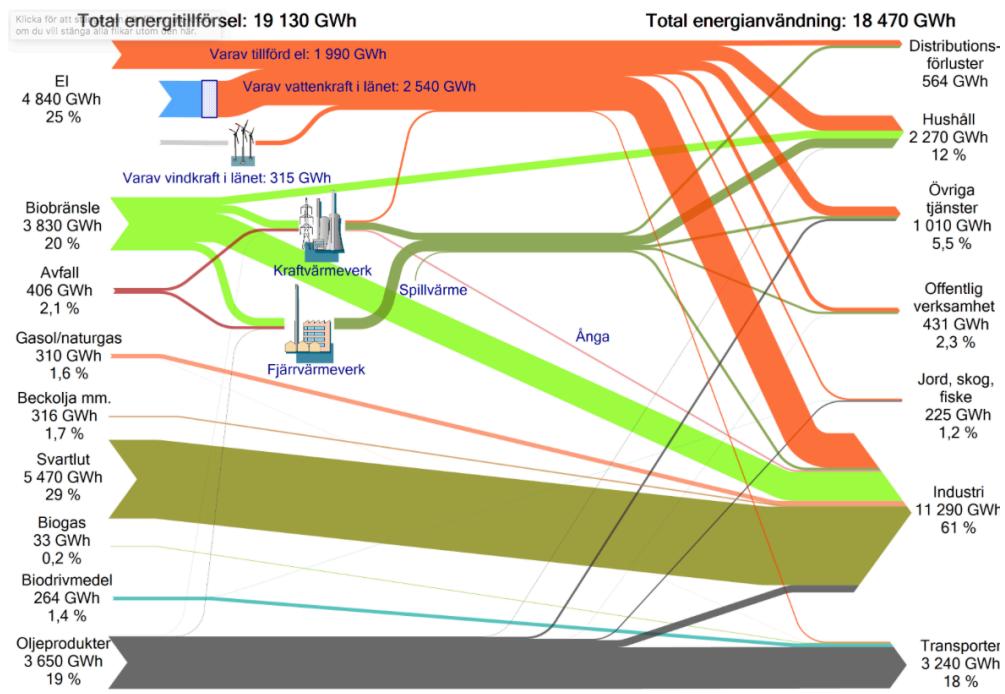


Figure 6: Energy balance Värmland 2015.

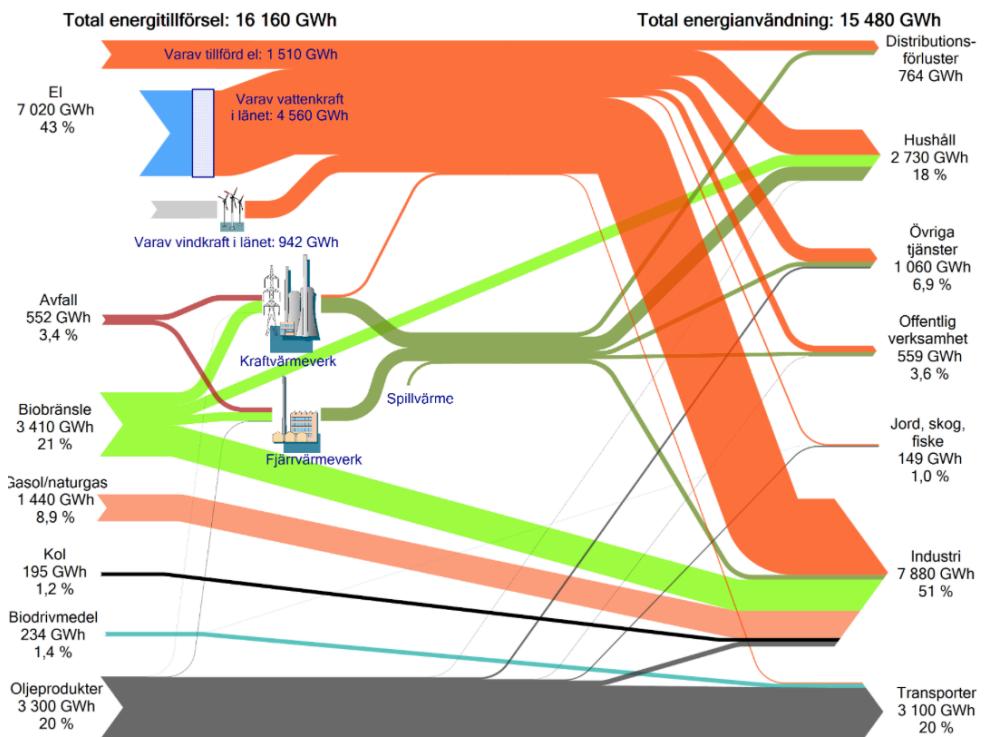
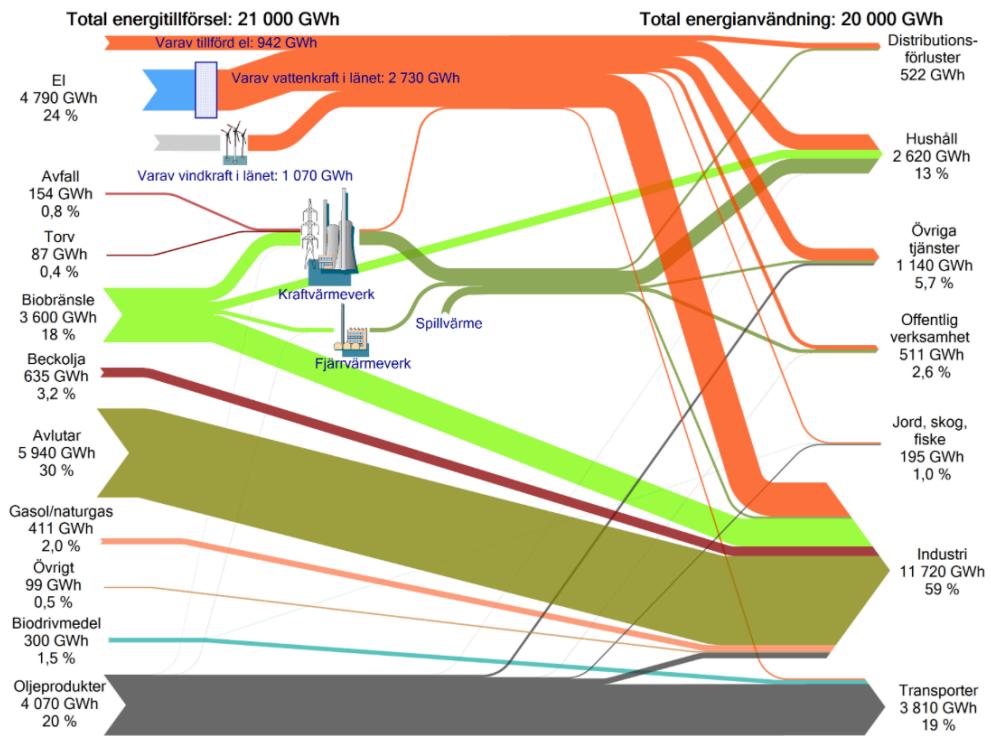
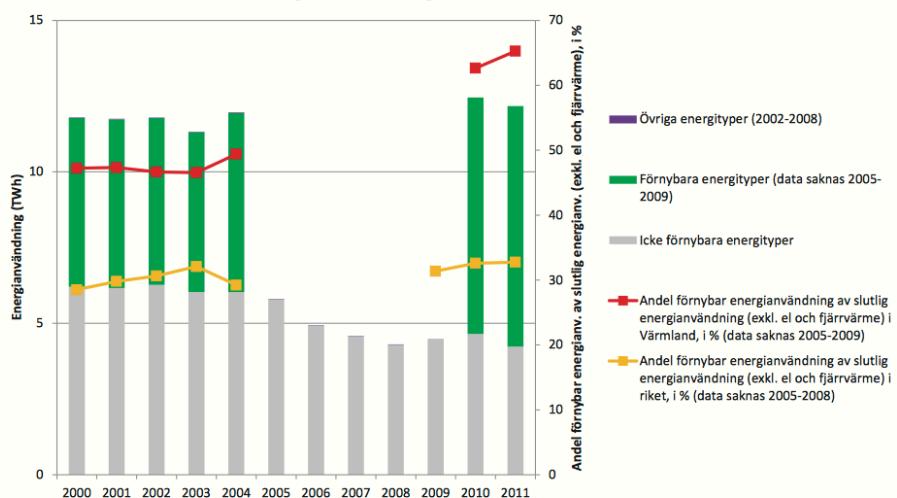


Figure 7: Energy balance Dalarnas län 2015



Annex 5 – Region Värmland 2014

Slutlig energianvändning i Värmland samt andelen förnybar energianvändning i Värmland och riket



Figur 35: Slutlig energianvändning i Värmland samt andelen förnybar energianvändning i Värmland och riket.

Källa: SCB. Bearbetning: Gustaf Norlén och Linus Rispling, Nordregio

Figure 9: Energy consumption in Värmland

Workshop 4: Promoting entrepreneurship and mobilising the private sector

Annex 1- European Commission 2013

Figure 6. The map of REDI scores in five cluster categories in 125 European Union regions, 2013

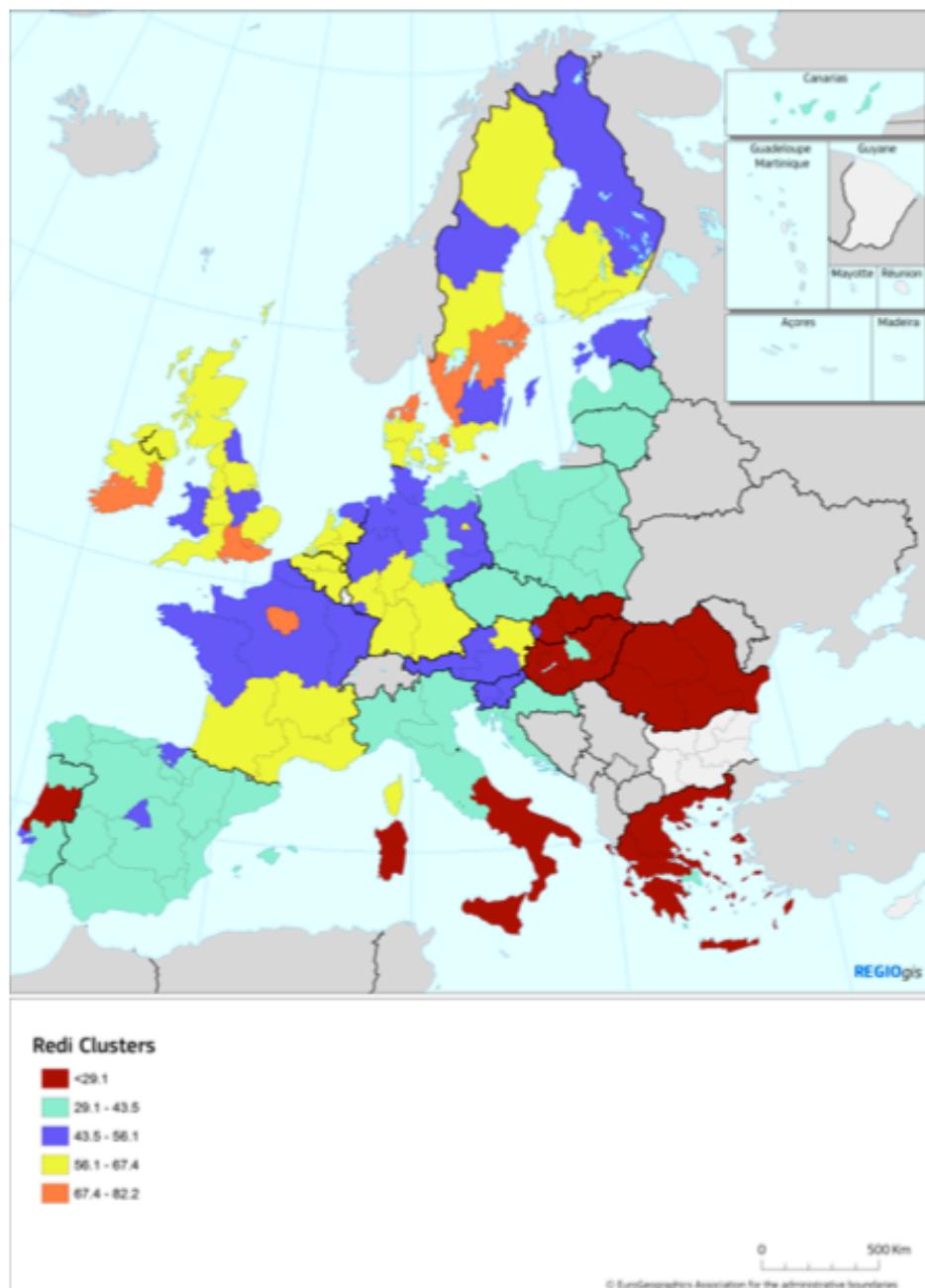


Figure 1: REDI scores in 125 European Union regions

	EU regional average	Norra Mellansverige	Wallonia
Opportunity perception	0.5	0.98	0.46
Strat-up skills	0.5	0.54	0.66
Risk Perception	0.5	0.79	0.79
Networking	0.5	0.95	0.42
Cultural support	0.5	0.71	0.39
Opportunity startup	0.5	0.93	0.47
Technology Absorption	0.5	0.5	0.57
Human Capital	0.5	0.65	0.68
Competition	0.5	0.41	0.66
Product innovation	0.5	0.33	0.57
Process innovation	0.5	0.4	0.98
High growth	0.5	0.4	0.75
Globalization	0.5	0.48	0.97
Financing	0.5	0.86	0.68

Figure 2: The fourteen average equated pillar values of the EU regional average, Norra Mellansverige and Wallonia

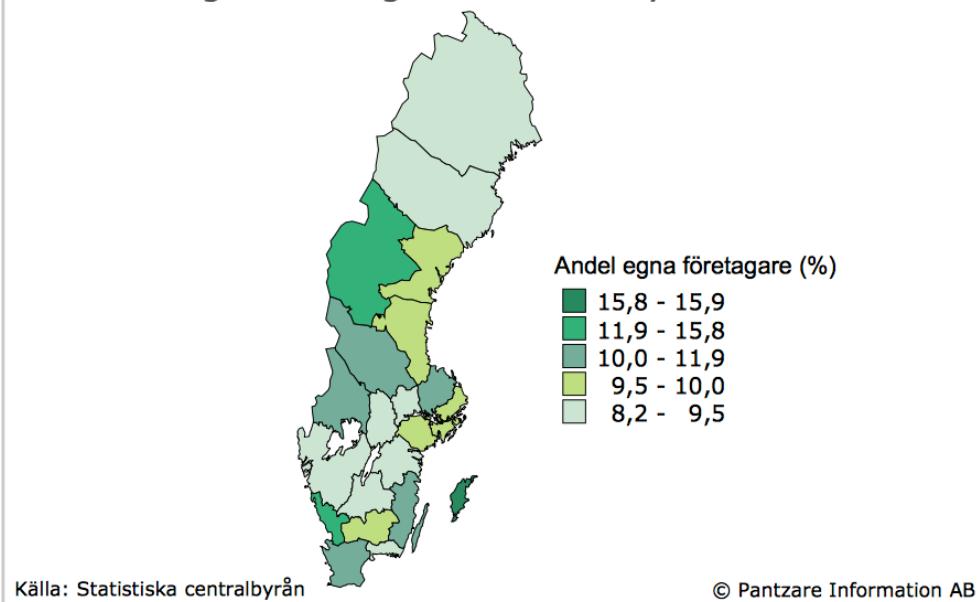
Annex 2- Regionfakta 2018**Andel egna företagare av totalt sysselsatta 2016**

Figure 3: The self-employed as a total share of the employed in 2016

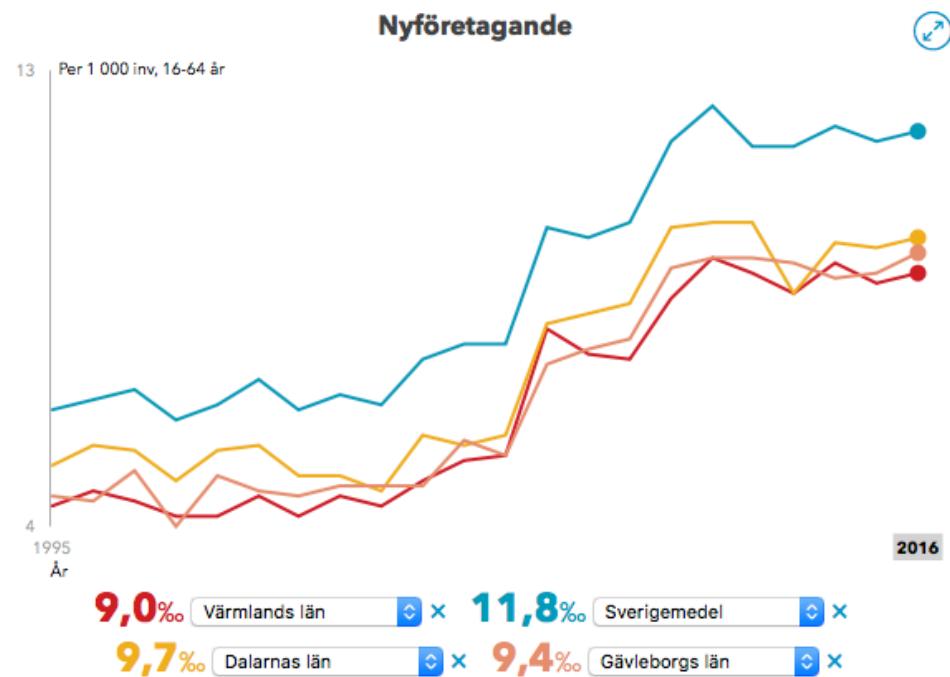
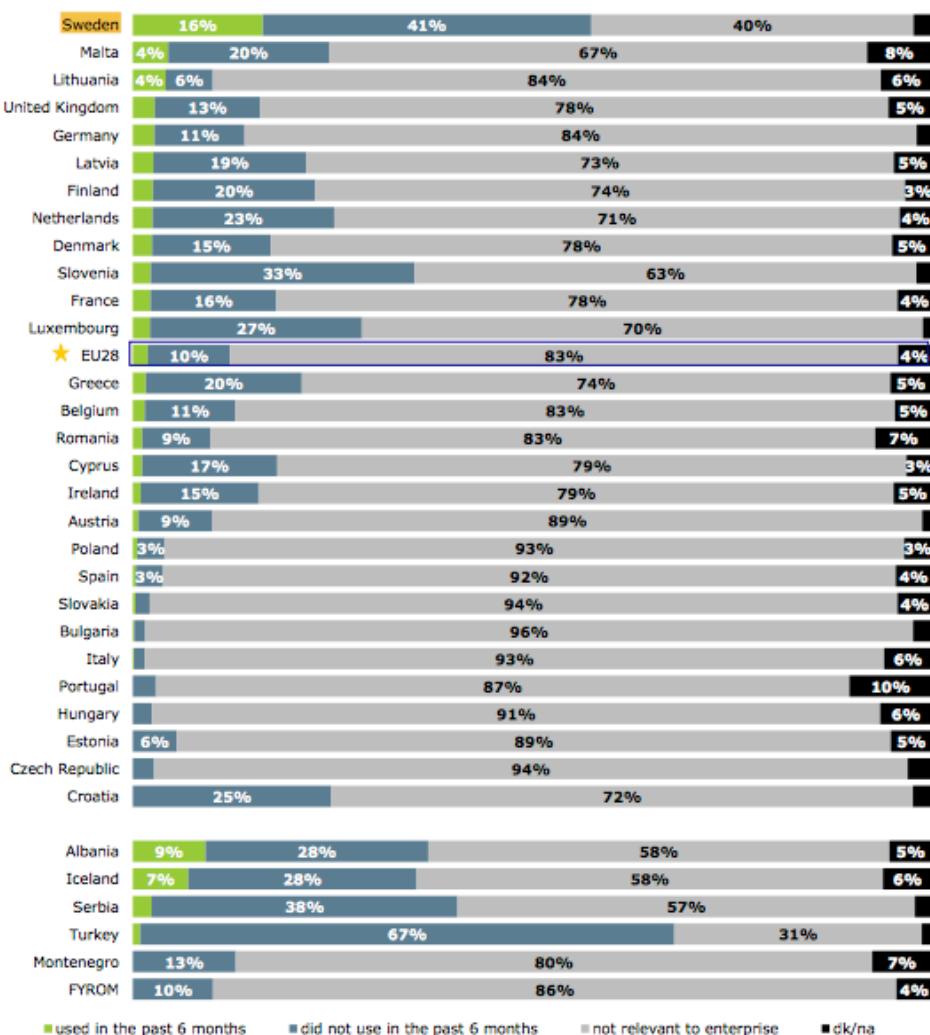
Annex 3- Ekonomifakta 2018

Figure 4: Number of startups in Sweden, Värmland, Dalarna and Gävleborg per 1000 inhabitants (16-64 years) from 1995 to 2016

Annex 4- European Commission 2017



Q4j. Equity capital - Are the following sources of financing relevant to your enterprise, that is, have you used them in the past or considered using them in the future? Have you issued equity in the past six months?

Source: SAFE, 2017; edited by Panteia.

Figure 5: Use of equity capital in EU countries

Annex 5 – Nordregio 2018

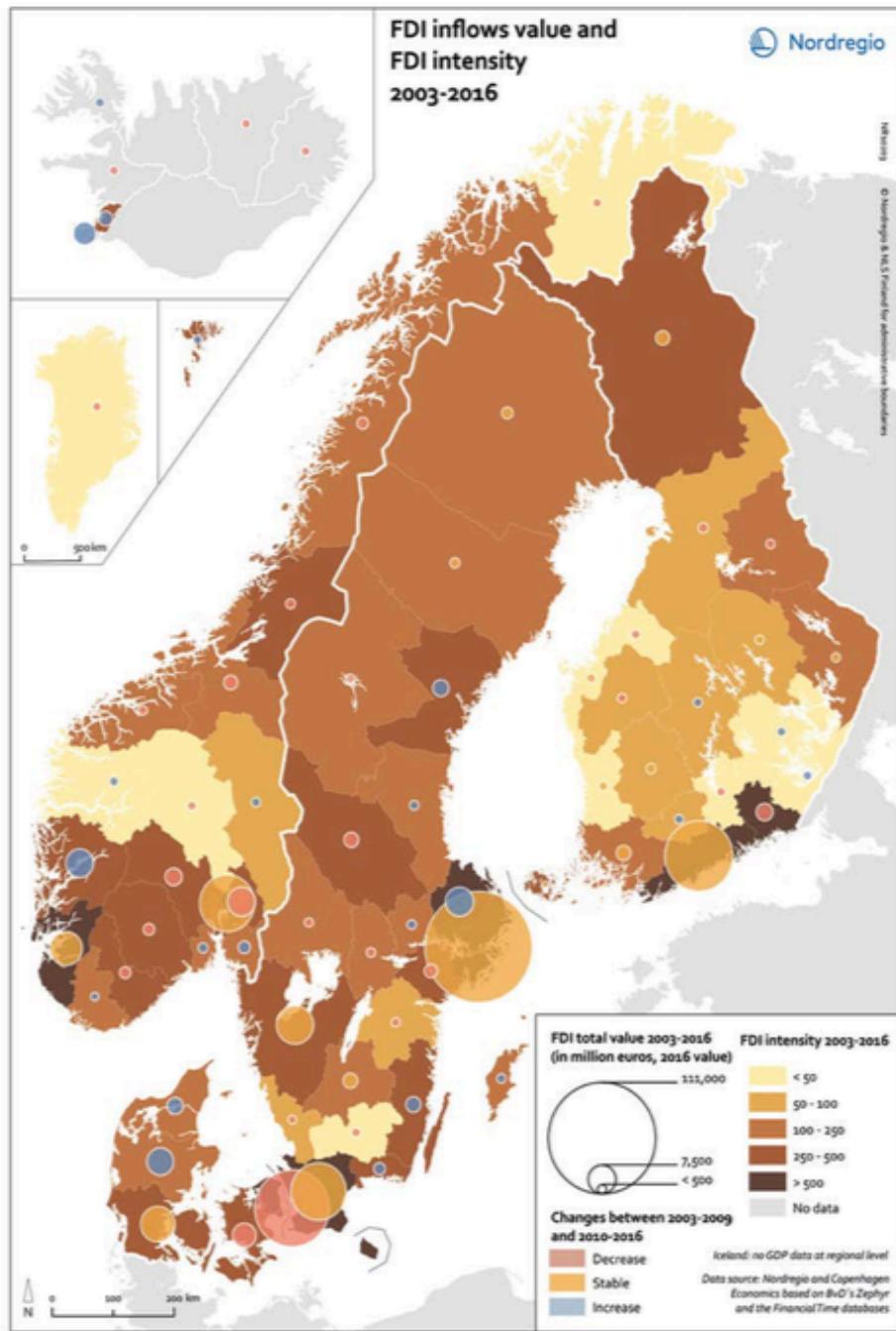


Figure 10.5 FDI inflows value and FDI intensity 2003–2016.

Figure 6: FDI inflows value and FDI intensity 2003-2016

Workshop 5: Inclusive growth

Annex 1- Statistiska centralbyrån 2016

Utbildningsnivå för befolkningen 25–64 år, 1990, 2000 och 2015

Procentuell fördelning och antal i 1 000-tal

Utbildningsnivå	1990		2000		2015	
	Kv	M	Kv	M	Kv	M
25–44 år						
Förgymnasial	21	24	11	14	9	11
Gymnasial	51	49	52	54	36	45
Eftergymnasial	28	25	36	31	54	40
Därav						
kortare än 3 år	15	12	17	15	15	15
3 år eller längre	13	13	19	15	39	25
Uppgift saknas	1	2	1	1	2	3
Totalt procent	100	100	100	100	100	100
antal	1 188	1 244	1 193	1 244	1 253	1 309
45–64 år						
Förgymnasial	46	45	27	31	12	17
Gymnasial	35	36	44	42	47	50
Eftergymnasial	18	18	29	25	40	33
Därav						
kortare än 3 år	8	7	13	10	16	15
3 år eller längre	10	11	16	15	24	18
Uppgift saknas	1	1	1	1	1	1
Totalt procent	100	100	100	100	100	100
antal	960	959	1 121	1 138	1 211	1 234

Källa: Utbildningsregistret, SCB

Figure 1: Education level among the Swedish population based on age and sex

Annex 2- Eurostat 2015a

Gender gap for part-time employment, by NUTS level 2 region, 2014 (*)
 (percentage points difference between the share of women aged 15–64 working part-time and the share of men aged 15–64 working part-time)

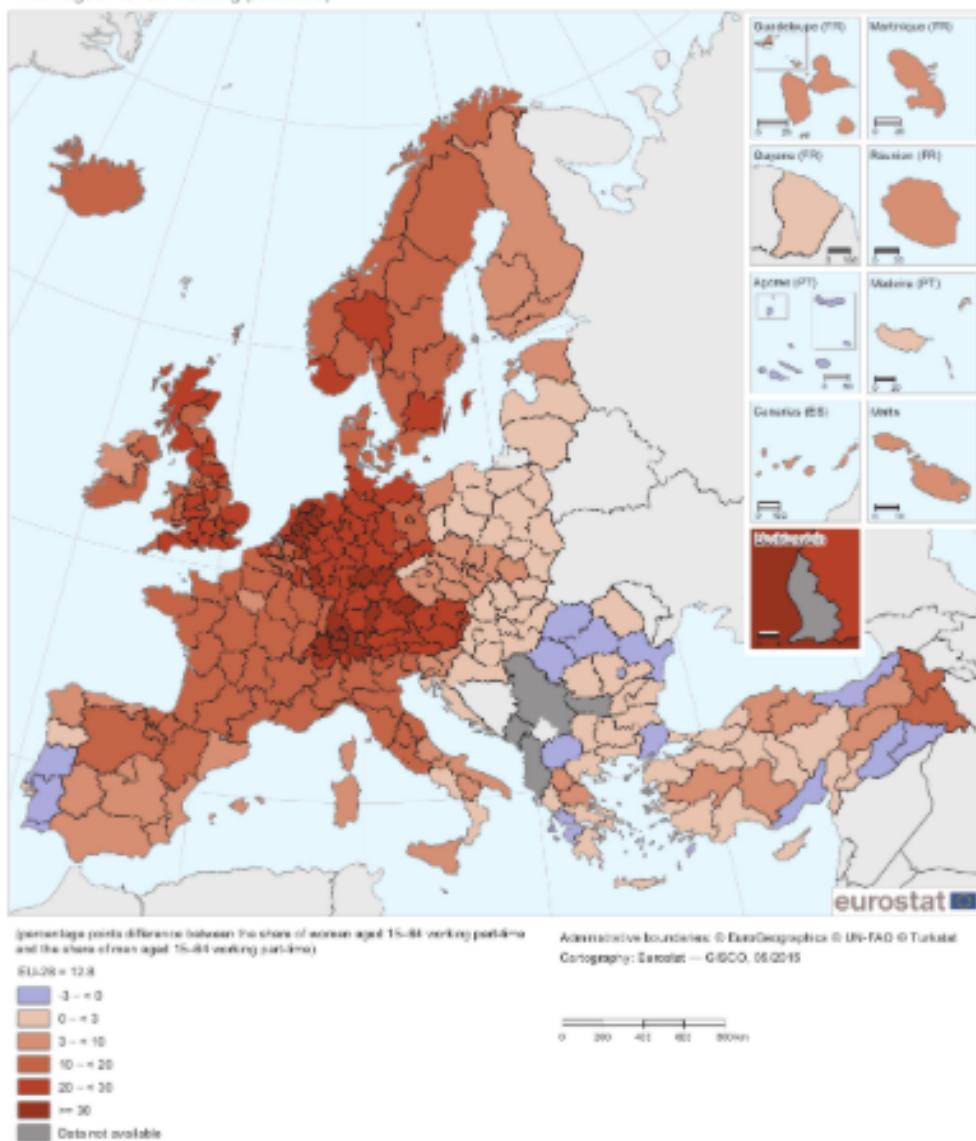


Figure 2: Gender gap for part time employment at NUTS2-level

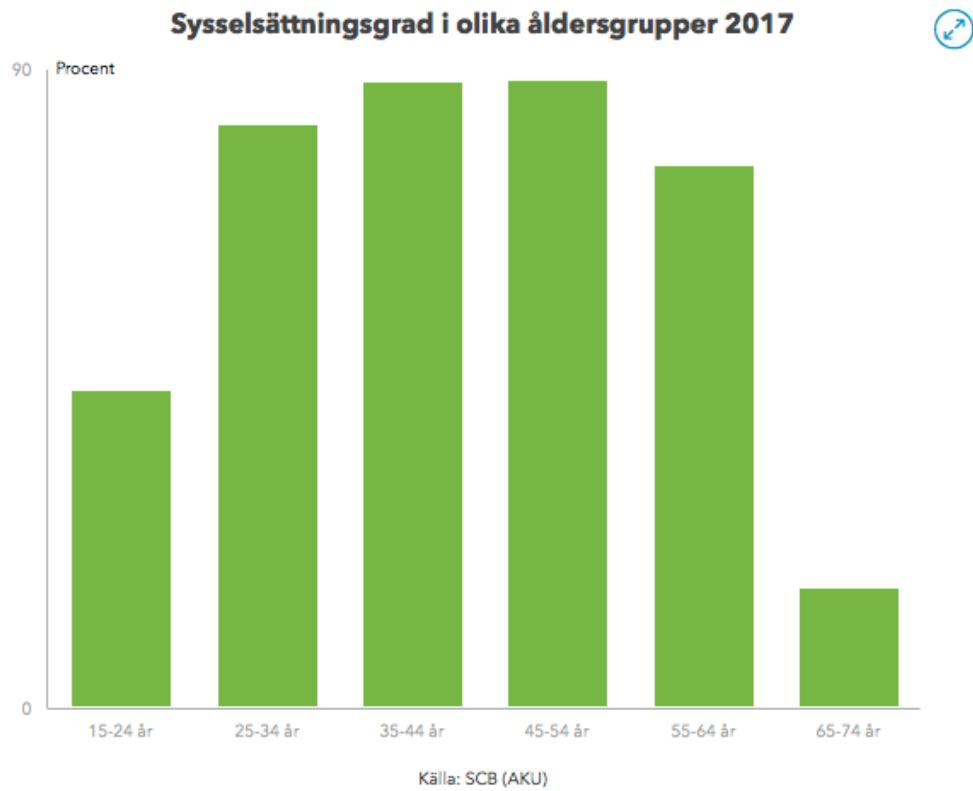
Annex 3- Ekonomifakta (2018b)

Figure 3: Employment in different age groups in Sweden 2017

Annex 4- Migrationsinfo 2017; u.å
Sysselsättningsgrad 2005–2016, 20–64 år efter inrikes- och utrikesfödda och kön

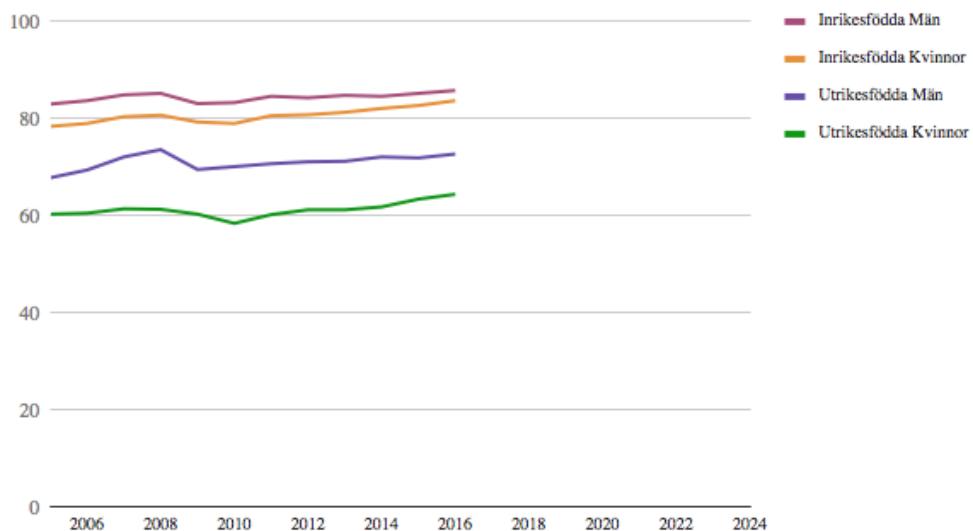


Figure 4: Employment level among men born in Sweden and foreign born, and Women born in Sweden and foreign born

Förvärvsarbetande: Värmlands län

Andel förvärvsarbetande efter födelseregion, Värmlands län kommun 1998 - 2014. Källa: [SCB](#)

Sverige | Norden exkl Sverige | EU/EFTA exkl Norden | Världen exkl EU/EFTA

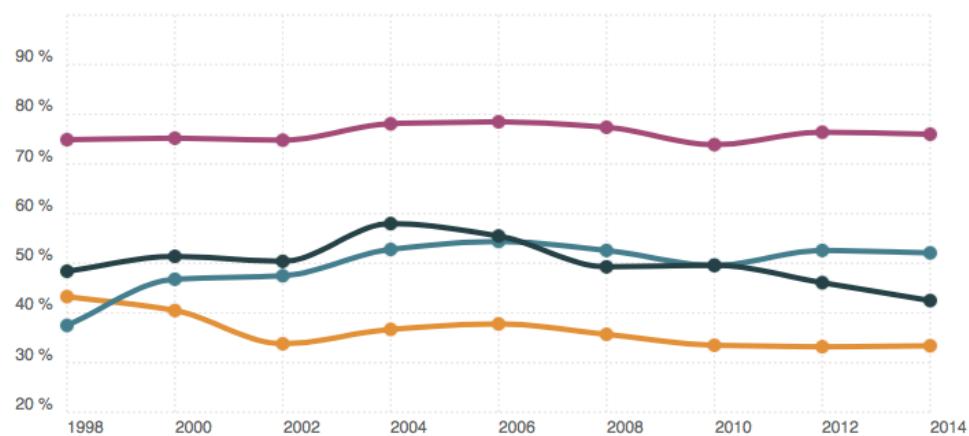


Figure 5: Percentage of the population working depending on birth place in Värmland 1998-2014

Förvärvsarbetande: Dalarnas län

Andel förvärvsarbetande efter födelseregion, Dalarnas län kommun 1998 - 2014. Källa: [SCB](#)



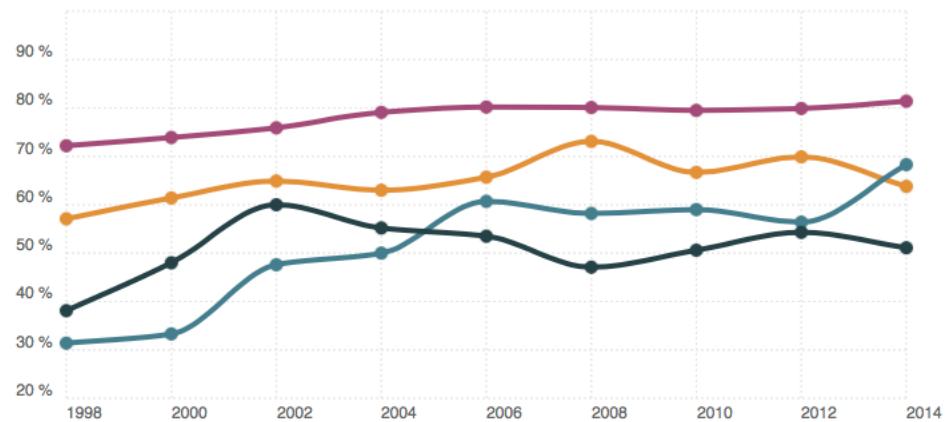


Figure 6: Percentage of the population working depending on birth place in Dalarna 1998-2014

Förvärvsarbetande: Gävleborgs län

Andel förvärvsarbetande efter födelseregion, Gävleborgs län kommun 1998 - 2014. Källa: [SCB](#)



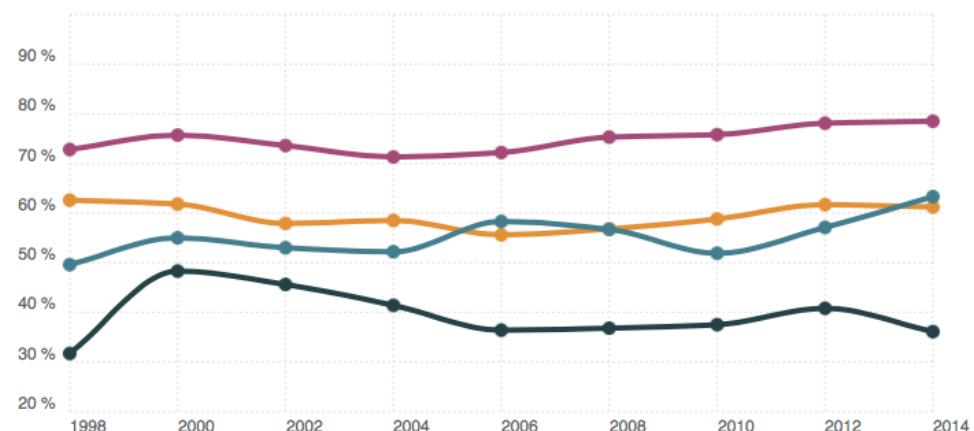
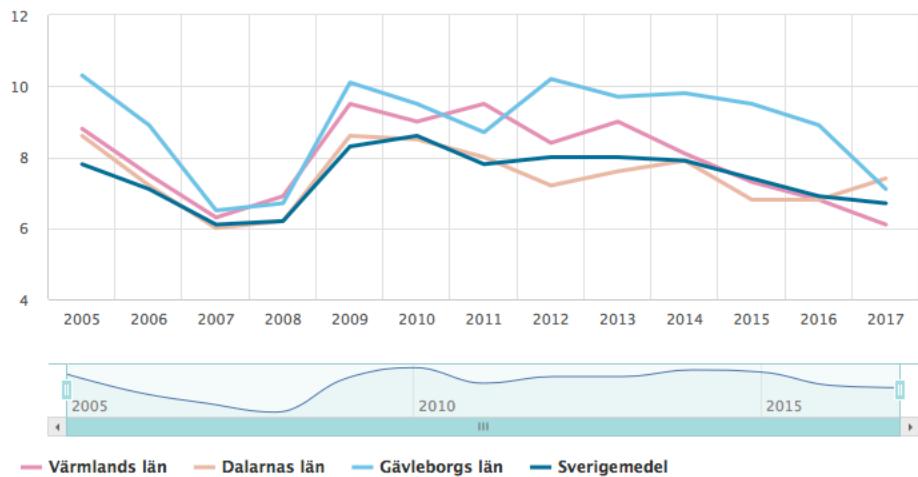


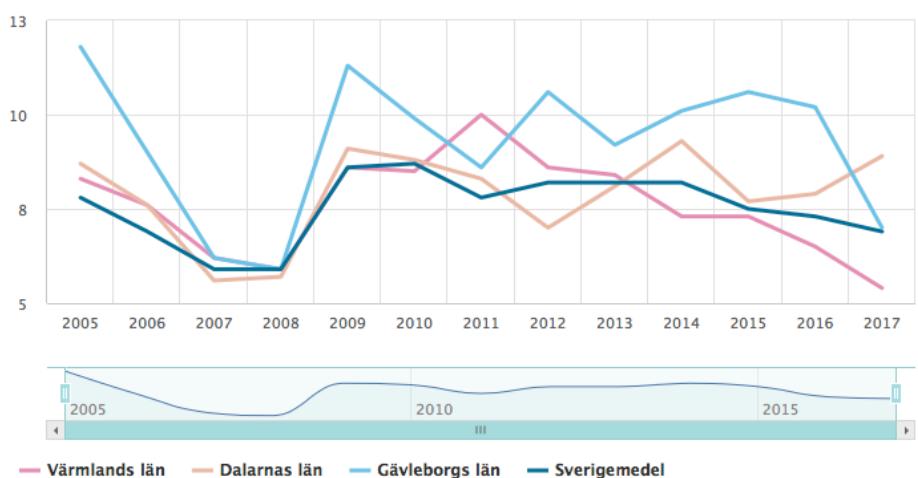
Figure 7: Percentage of the population working depending on birth place in Gävleborg 1998- 2014

Annex 5- Tillväxtverket (2018)



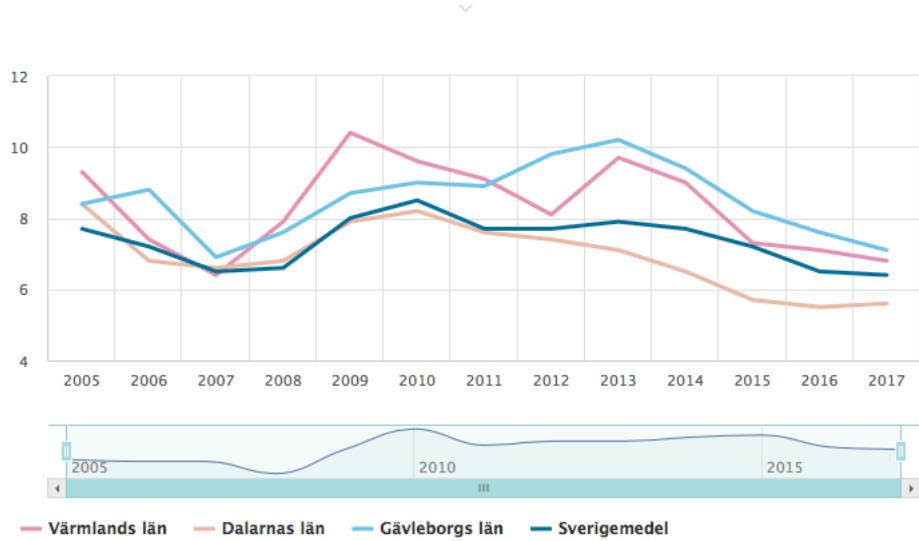
Källa: SCB, Arbetskraftsundersökningen (AKU)

Figure 8: The change in unemployment rate between 2005- 2017 in Sweden, Värmland, Dalarna and Gävleborg



Källa: SCB, Arbetskraftsundersökningen (AKU)

Figure 9: The change in unemployment rate for men between 2005- 2017 in Sweden, Värmland, Dalarna and Gävleborg



Källa: SCB, Arbetskraftsundersökningen (AKU)

Figure 10: The change in unemployment rate for **women** between 2005- 2017 in Sweden, Värmland, Dalarna and Gävleborg