NATIONAL PEER REVIEW WORKSHOP, 3-4 July 2014, Dublin

# External dimension of RIS3 – two Nordic examples

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#### The external dimension

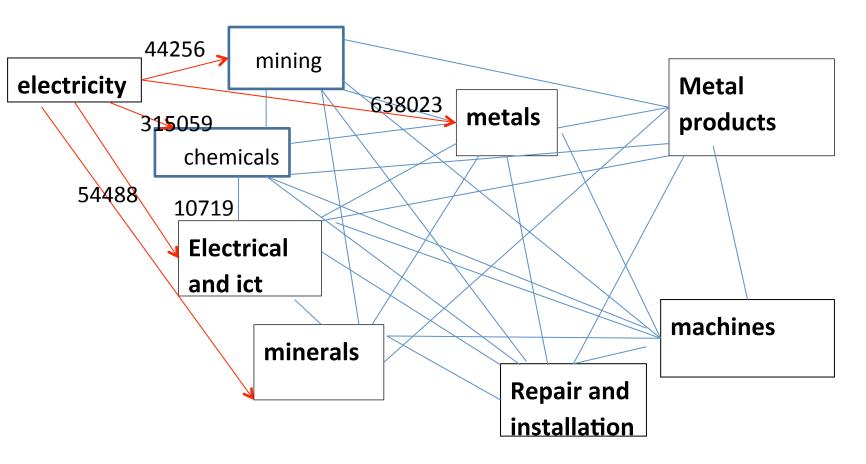
- Co-operation learning from each other through GAP analysis...
- Co-optation discovering common interests
- Co-specialization creating new European value chains and systems of innovation through complimentarities

### Who is the right partner for you?

- Who are you?
- What are your strengths and weaknesses?
- What is your scenario and roadmap?
- What are you missing in your innovation system?
- How well connected or disconnected is your tripple helix / system of innovation?

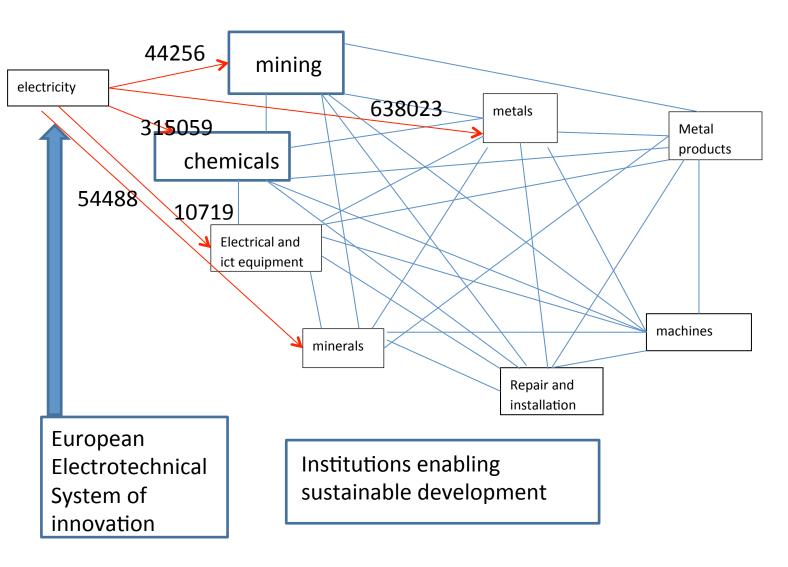
# EXAMPLE 1 CREATING NEW EUROPEAN SYSTEMS OF INNOVATION THROUGH CO-SPECIALIZATION

#### A green energy region (sleeping giant)



WHAT IS MISSING?

### A green energy cluster strategy



## Energy and environmental technology is becoming the engine of Finnish exports.

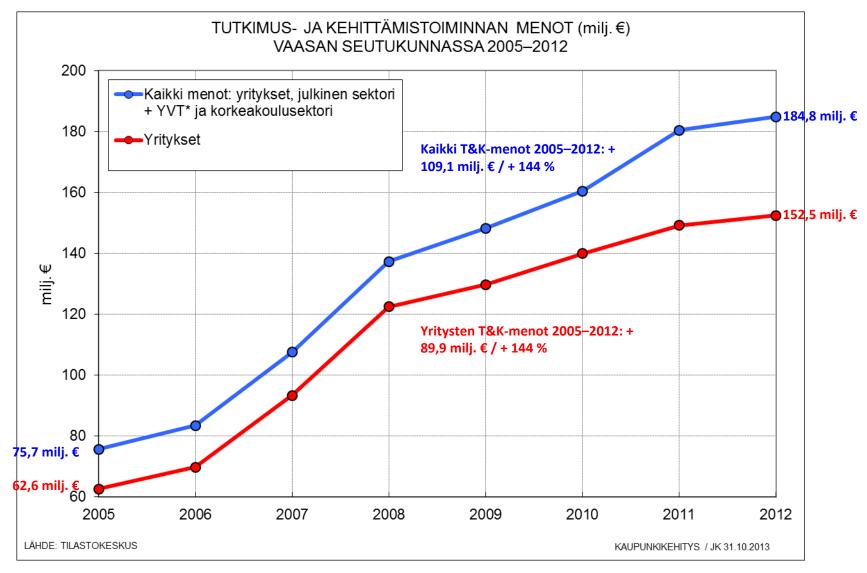
- More than 140 businesses, several of which are global market leaders in their field
- Total business turnover some EUR 4,4 billion annually, export rate over 80%
- About 30 % of total Finnish energy technology export, population less than 2%
- Current number of employees 10,000, ¼ of Finland's total energy sector manpower
- Number of employees in 2020 more than 20,000
- More than 1000 experts specialized in energy related research and development
- Two of the three Finnish companies with the highest levels of R&D investment, are situated in Vaasa



#### R&D-expenditure in Vaasa region 2005–2012

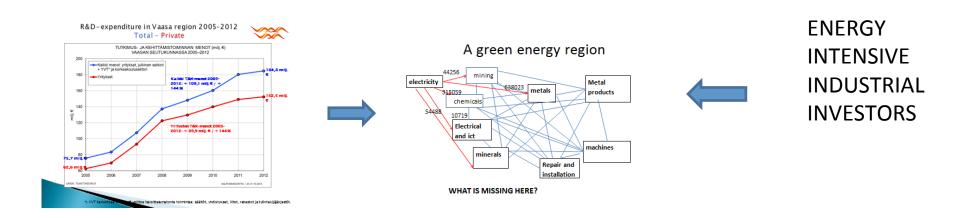






<sup>\*)</sup> YVT tarkoittaa yksityistä voittoa tavoittelematonta toimintaa: säätiöt, yhdistykset, liitot, rahastot ja työntekijäjärjestöt.

# A TRANSNATIONAL STRATEGY FOR INDUSTRIALIZATION AND UPSCALING OF NEW AND COST EFFICIENT GREEN ENERGY TECHNOLOGIES

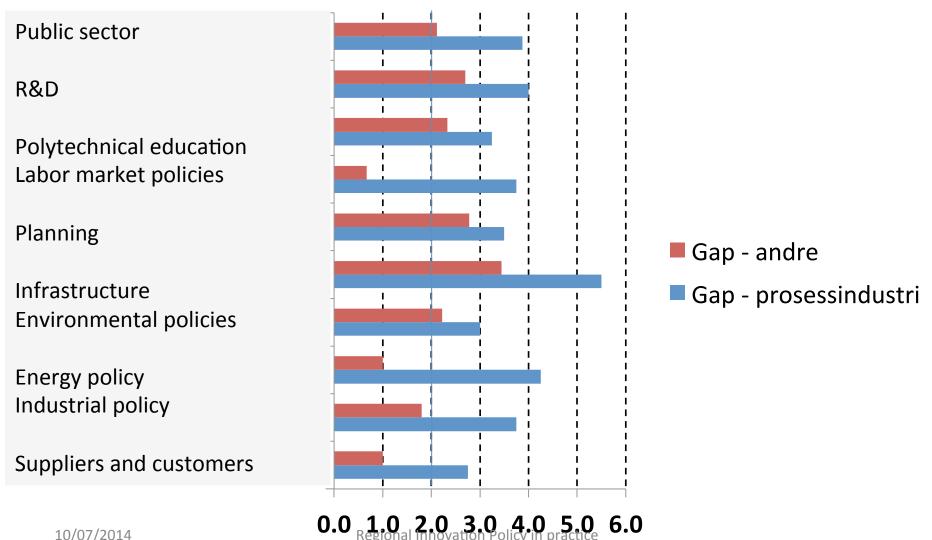


# Example 2 GAP ANALYSIS OF THE TRIPPLE HELIX (TRANSNATIONAL LEARNING)

# GAP ANALYSIS: IDENTIFY PROBLEMS, LOOK FOR SOLUTIONS

- GAP analysis comes from business studies
- We have applied GAP analysis on the tripple helix
- Questions to business leaders (AND OTHERS IN THE 3H):
  - What is your expectations to research and education (and other sectors) in your region (ON A SCALE FROM 1 – 10) – and
  - what are your experiences (ON A SCALE FROM 1-10)?
- GAP is the difference.
- A GAP > 2 indicates a problem
- A small GAP with high expectations indicates that this might be a good solution
- compare GAPs across regions in different countries, and in the same region through time (improvements)
- Dialogue on PROBLEMS, search for HAPPY solutions.

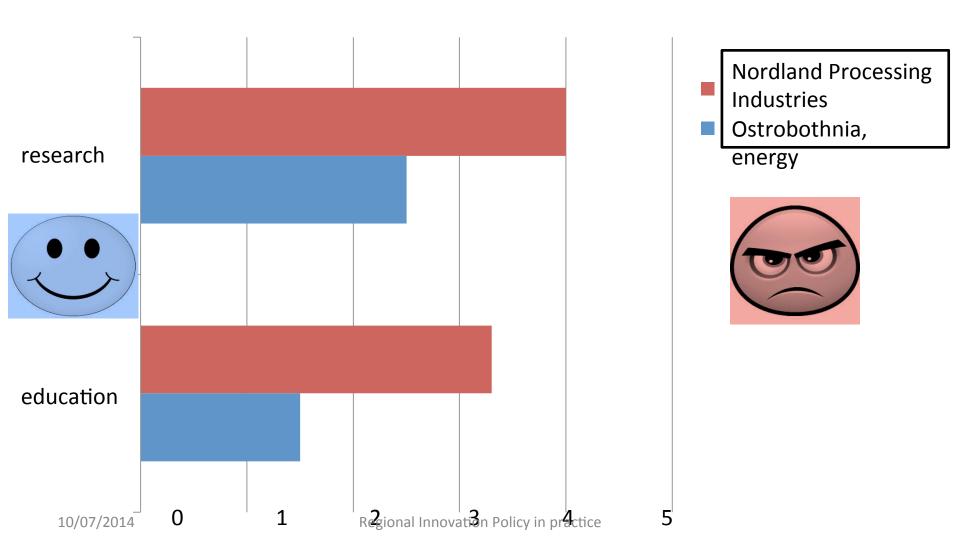
### GAP ANALYSIS, TRIPPLE HELIX, example of Norwegian 3H data



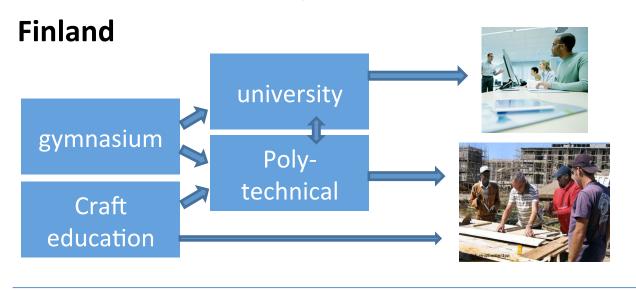
## Energy technology firms, cooperation with Universities in Ostrobothnia

	Energy technology sector, Expectations and experiences with Universities in Ostrobothnia (n 6)		
	Expectations	Experiences	Gap
Education	8,5	7,0	-1,5
Research	8,5	6,0	-2,5
Social responsibility	7,2	6,6	-0,6

## GAP comparisons: Why are Finns happier that Norwegians? (it cannot be results in the Olympics)

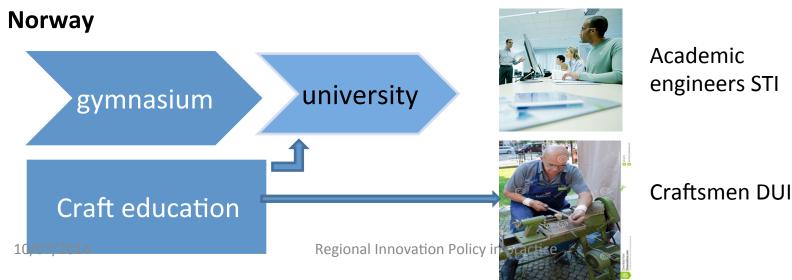


# Explain the difference in GAP: Norway and Finland has different educational systems which creates different systems of innovation



Academic engineers STI

Engineers working with craftsmen STI + DUI



Explain the difference Kokkola University Consortium Applied chemistry

Students are mostly adults, working in the regional industries

Their academic degrees are based on research which often also is innovation projects in the firms where they are working



#### The "connected" region

#### **PUBLIC SECTOR**

Developing coherent policies that link territorial development to innovation

Analysis of evidence

Building infrastructures for growth

Evidence based S3 policies

Generating intellectual and human capital assets for the region

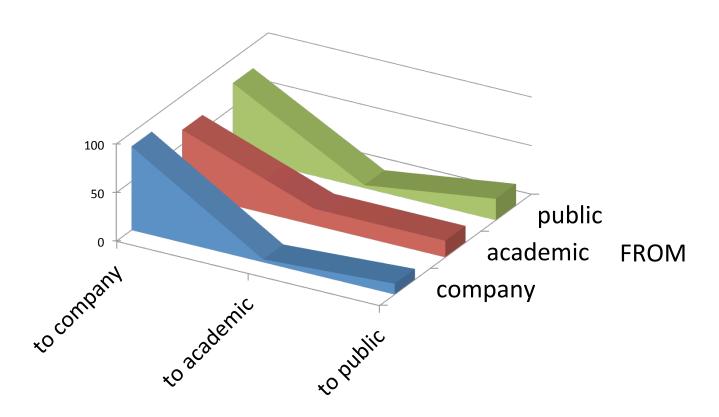
Commercial. of research, skill develop.

Invest in people and ideas that will generate growth

HIGHER EDUCATION SECTOR

**PRIVATE SECTOR** 

## Number of partners in a companydriven tripple helix in Ostrobothnia



THE PUBLIC SECTOR AND ACADEMIA ARE RELATED TO THE COMPANIES, AND THE COMPANIES ARE RELATED TO EACH OTHER AND THE WORLD

# Gap analysis – Smart Specialisation - recommendations

- Can be applied in various regions in the EU.
- Can be used in comparison across regions in different countries.
- Can be used as a method of transnational learning in smart specialisation.
- Can be used as an indicator of the success of smart specialisation strategy and other interventions.