

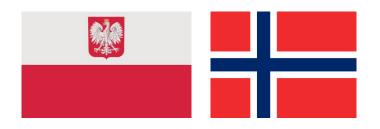




# POLNORECO

POLISH NORWEGIAN COOPERATION FOR ENVIRONMENTAL FRIENDLY AND INNOVATIVE SOLUTIONS IN SMES - POLNORECO

28 November 2017 Katarzyna A. Kazimierczuk, Project Director





## Bilateral Cooperation Case

- Polish Norwegian Cooperation For Environmental Friendly And Innovative Solutions In SME — POLNORECO
- Project financed by PL04: Saving energy and promoting renewable energy sources in the framework of EEA Grants
- Project period (March 2016 to October 2017)
- Budget 1,5mil. PLN
- First scheme which actually allowed for implementation projects AND capacity building









## **Project activities**

- 1. Information campaign and recruitment of participants of the project
  - cooperation with regional chambers of commerce, dedicated mailing,
     social and branch media, newsletter
- 2. Implementation of 2 pilot innovative projects in Lubelskie and Podlaskie
  Voivodeship
  - 2 audits, 2 reports, 3 workshops
- 3. Popularization of environmental innovation
  - study visit in Norway, 3 conferences, web-based platform
- 4. Educational component
  - 13 seminars in Poland, e-education



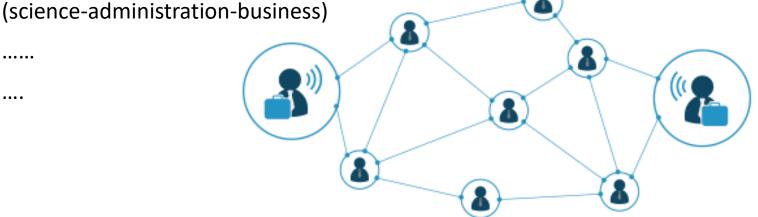






### BILATERAL COOPERATION

- 1. Exchange of experience and knowledge at institutional level between the organisations involved on both the Polish and the Norwegian side in the implementation of the project
- 2. Exchange of experience between experts involved in the project implementation in the field of technology and environment friendly solutions
- Exchanges of experience in the area of the organisation of the SME support system - (Kompetansemegling, VRI Trøndelag especially in terms of the model triple helix



















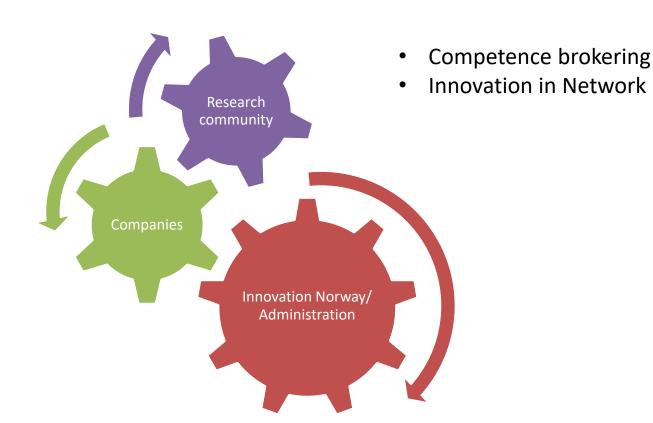








## Tripple helix model as a basis





















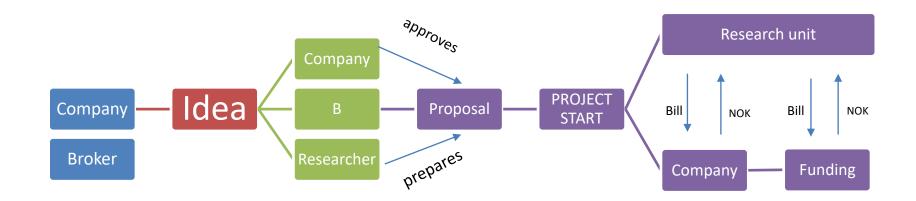








# Knowlede to be transfered: Competence brokering model



















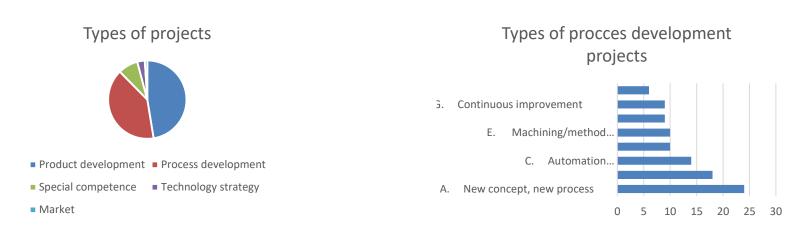








# Competence brokering (VRI) as SME innovation driver



- 291 projects in Innlandet realised (in Trøndelag respectatively similar)
- Results from a national evaluation of Research based brokerage showed that 94 % of the participated SMEs would like to cooperate with R&D institutions again (re-purchase), and 92 % of the participated researches would like to cooperate with SMEs again
- "The VRI program is an important instrument for developing regional research and innovation systems, including innovation within companies". Conclusion of VRI 2007-2016 assessment by Oxford Research in cooperation with the Centre for Innovation, Research and Competence in the Learning Economy (CIRCLE) at Lund University in Sweden



# Conlusions from in depth interviews conducted among participating companies

- Education and background affect much if the company is open for cooperation
- Relationships, existing networks and knowledge of R&D environment are crucial for participation in R&D-projects
- The idea for a project must be well rooted in the company
- Companies with an engaged administrative board, also with external members, are more focused on cooperation with R&D-institutes
- After finishing a R&D-project there has been a change in attitude in the companies when it comes to the benefits of cooperating with R&D institutes and universities
- Competence brokering and technology transfer gives valuable input of knowledge to the companies
- Solving company specific problems with external knowledge gives more rapid and better results
- The broker is important in the project development inclusive finding the right researcher

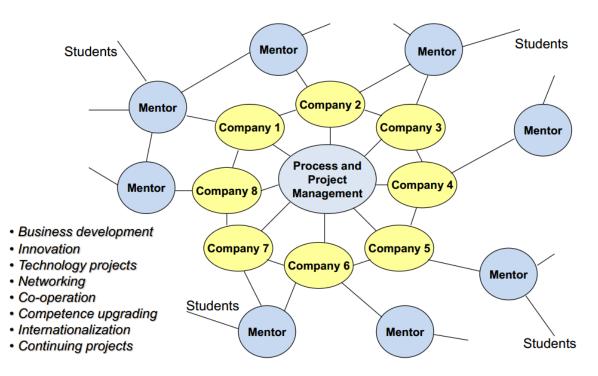








### Innovation in network



















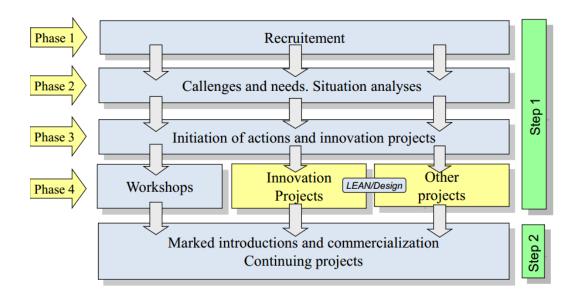








# Innovation in Network Model





# Norwegian experiences of implementation

- Each company has their own mentor (researcher, professor, etc.) for the whole project period
- The creative environment in networks introduces many new ideas and innovative projects, from 3 to 6 projects in each participating SME
- Mostly big projects
- Established networks last several years
- Use of R&D knowledge for solving specific challenges
- Use of students as trainees, in bachelor and master's theses/projects
- Increased knowledge in the SME's, and also in the institutes









## How we can learn from IT?





























## What is knowledge?

• "Knowledge is a fluid mix of framed experience, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices and norms".

Davenport and Prusak (1998, page 5) say

























# What we have done for SME direct support?







Company competence projects (meat processing plant, mounting LCD, press shops)



2 x 3 workshops (pararel groups in podlaskie and lubelskie)



Study tour of partcipating companies to Norway



























## Scheme of Company Projects

#### Step 1: Pre-visit preparation

- Confidentiality agreement
- Desk study for the company
- 1st questionnaire (filled in by local chamber of commerce

#### Step 2: Visit to the company

- Company visit ( 3 days)
- On site procedures (in depth interviews, documents reviews, workshops)
- Milestone : draft report on green business development

### Step 3: Reporting and recommendation

- Desktop rewiewes
- Identyifing technologies and solutions applicable
- Issuing draft/final report for the company



































## Organizational scheme for network based activities

#### I workshop

- Establishing relations with representatives companies participating in the workshop
- Introduction to the project
- Presentation of experts
- Introducing of the concept of network projects and competence brokering
- Energy efficiency in SMEs concept and principles.

#### **II** workshop

- Discussion and summary of a study visit to Norway
- Presentation of the lean manufacturing concept as a method for implementation of small scale innovations in SMEs.
- Presentation of lean cases (including energy efficiency) in Norway
- Presentation of lean manufacturing cases (with regard to energy efficiency) in Poland (special expert from Bialystok University of Technology)

#### III workshop

- Lean manufacturing in my company - workshops and activating exercises -
- Presentation of possible sources of funding for Polish-Norwegian projects
- Identification of Lead **Projects**





























### SME observations - Poland

- Labour costs, especially in Eastern regions are low
- Centralised management style most of the companies in the project have one or two owners which are also responsible for daily management
- Companies in the project are also in relevant part family companies where at least to generations are involved in daily operation what also seems to illustrate well the characteristic of the sector
- Small culture for external cooperation-however local chamber of commerce as business associations seems to function
- Polish business culture is low trust culture, which is also the result of the historical set up
- Approach towards sharing knowledge and learning is initially reluctant. It takes time to build up the trust in group and convince the participants that delivered knowledge may be relevant and useful for them
- In Poland there is no practice of hiring external advisory board (nor the legal framework for it – being a member of company board is equal to financial responsibility for its performance in case of ineffective procedure of debts recovery implemented toward the limited liability company)

















POLISH CHAMBER OF COMMERCE





## SMEs observations – Norway

- High labor costs:
- Short distance between employees and management
- Employees who take responsibility
- Educated people and high competence
- High IT competence in the Norwegian population
- Many SMEs in the Norwegian industry business.
- Culture for collaboration within the company and also between companies
- Strong focus on sharing knowledge and experience: In general, employees / companies have positive attitudes toward sharing knowledge and learning
- Establishment of the steering committee board with an external participation.



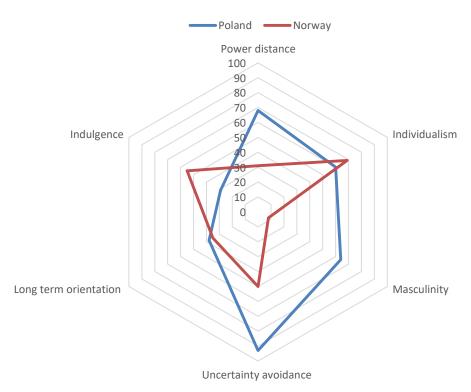






## National culture model

#### National culture dimensions











## Six dimensions model by Geert Hofstede

#### Individualism

is the extent to which people feel independent, it does not mean egoism. It means that individual choices and decisions are expected. Collectivism does not mean closeness. It means that one "knows one's place" in life, which is determined socially.

#### **Power Distance**

is the extent to which the less powerful members of organizations and institutions (like the family) accept and expect that power is distributed unequally.

#### **Masculinity**

Masculinity is the extent to which the use of force in endorsed socially.

#### **Uncertainity avoidance**

deals with a society's tolerance for uncertainty and ambiguity. It has to do with anxiety and distrust in the face of the unknown, and conversely, with a wish to have fixed habits and rituals, and to know the truth.

#### Long term orientation

In a long-time-oriented culture, the basic notion about the world is that it is in flux, and preparing for the future is always needed. In a short-timeoriented culture, the world is essentially as it was created, so that the past provides a moral compass, and adhering to it is morally good.

#### Indulgence

In an indulgent culture it is good to be free. Doing what your impulses want you to do, is good. Friends are important and life makes sense. In a restrained culture, the feeling is that life is hard, and duty, not freedom, is the normal state of being. .

<sup>\*</sup> Place your footnotes / notes here



























# Lesson learned from knowledge transfer in POLNORECO

#### **SME** support schemes

- Since the trust barrier is recognizable, companies having memberships in local business associations should be the target group as the minimum trust level is be achieved there.
- Period of being part of the network/ workshop group should be longer than the period that was introduced in POLNORECO, in order to successfully build the community.

#### **Knowledge delivered to SMEs**

- Knowledge needs to be decontextualized and more focus on putting it in context of CEE countries should be made.
- More focus on presenting economic indicators and achievement: Polish business culture is not based on cooperation but on economic performance.
- Experience as the greatest learning tool.

























## Expriences from implementation

- Model of direct and small scale SME support is much more effective than soft communication actions implemented in Poland
- Program as VRI could be build undependatnly of structural funds/EEA Grants in regions
- The KEY success factor, which Polish regions are actually missing are BROKERS (having experience both from research and industry)
- Model of competence brokering has high need of transferability to Polish conditions
- Network projects are based on trust, openess and this is difficult to achive in Poland, therefore a good idea is to start with local buisness association









## Long term recommendations

- Most of the companies participating in workshops and study tour see competence brokering as the right tool to solve small scale problems is daily operation
- Exprienced broker is helping to shorten distance and faccilitate argreement between two worlds of industry and academia. There is a number of still available programms in Poland helping to finance research activities but there is no broker
- Next project should be designed with the greater participation of local research comunities









### THANK YOU































