



A framework for regional collaboration between trade and industry,
R&D institutions and the government authorities.

Competence brokering and the Program for Regional R&D and
Innovation (VRI)

Outline



- Norwegian Innovation Policy
 - OECD Reviews of Innovation Policy 2008: NORWAY
 - A system failure in the innovation system?
- The VRI program
 - History – continuity and change
 - Main innovation support tools
 - The main objectives



“Low business sector R&D expenditure today can be largely “understood” by the industrial structure’s smaller share of R&D-intensive industries than the OECD average. [...]

The key strategic task ahead is to maintain high, sustainable growth even after the oil and gas production has peaked. Any foreseeable restructuring of the Norwegian economy compatible with this goal will entail a shift towards other knowledge-based activities.

Policies to strengthen innovation capabilities, including the R&D component of the innovation system, are needed.”

(OECD Reviews of Innovation Policy 2008: NORWAY, p.7)

The "Norwegian puzzle"



On the one hand, Norway is among the most wealthy and productive economies in the world.

But on the other hand, Norway does not rank among the top countries in international comparisons of innovation and business research.

- Innovation activities in the Norwegian economy are not fully captured by common innovation indicators.
- Norway's industrial structure is not favoured by innovation surveys.
- The impact of the Norwegian model on innovation is underestimated.
- Innovation activities in the petroleum industry are underreported.

Ref. Norwegian Ministry of Trade and Industry

From first-generation innovation policy to third-generation policy



- ‘first-generation innovation policy’
 - a type of technology-push policy
- ‘second generation innovation policy’
 - well into the 1990’s, an approach grounded in *innovation policy based on system theory* and the perception that innovation is an interactive process
- ‘third-generation policy’
 - a more complete and cross-sectoral way of thinking
 - a greater degree of regional initiatives (regionalization: responsibility for the development, operation and financing of initiatives falls to a greater extent on a regional level)

(Jakobsen & Onsager 2008: The politics of innovation in regional industrial development)



Innovation Policy

- An interactive innovation model

Main innovation-related programs and initiatives

1. National programs
2. Regional differentiated national programs
3. Regional initiatives.

Program for Regional R&D and Innovation (VRI)



- The innovation system approach
 - “...a national initiative to facilitate the development of innovation systems at a regional level.” (Jakobsen et al. forthcoming)
- Continuation of work methods, networks and structures of former innovation programmes
 - Value Creation 2010
 - Competence brokering
 - The Industry College Collaboration Scheme
- “Lack of interaction between firms and the R&D sector has been identified as the main failure of the Norwegian system” (Jakobsen og Onsager 2008)



SMEs with no or little experiences with enterprise - R&D collaboration:

The largest enterprises were more innovative than small enterprises in 2006-2008.

54 per cent of enterprises with more than 500 employees developed new products or processes compared with just 24 per cent of enterprises with 10-49 employees.

The share is 29 per cent among enterprises with 5-9 employees.

Statistics Norway

Three important objectives in regional innovation programs

- Institutional objectives
- Enterprise objectives
- System objectives



Examples of funding instruments under the VRI programme:

- Mobility initiatives – projects that enable students, researchers and representatives of trade and industry to cross institutional boundaries and gain experience of and participate in new environments.
- **Competence brokering** – a scheme in which a qualified consultant (broker) helps companies to find suitable research expertise.
- Dialogue and broad participation – a form of cooperation that promotes employee involvement in innovation efforts, with action-oriented researchers assisting in the process.
- Regional foresight
- Regional dialogue conference
- Pre-project funding – funding designed to encourage companies to increase their R&D investment.



The Industry-College Collaboration Scheme

- The primary objective of the ICC scheme is to promote change at the institutional level within the university colleges, thereby enabling these institutions to become more active partners and knowledge suppliers for companies seeking to focus greater effort on R&D. Projects and activities under the scheme will be closely linked to relevant regional innovation processes.

Three different strategies



- The educational institution strategy focuses on **projects/activities relating to organisational issues, the development of new, creative, working and communication methods, and projects/activities that enhance industrial relevance within R&D and education.**
- The company strategy focuses on **concrete collaborative projects between companies and university colleges that will provide both parties with new experience and knowledge.**
- The network strategy is designed to **enable the educational institutions to become more active partners in regional and national arenas for industrial development and innovation.**

Value Creation 2010



- The programme Value Creation 2010 is a research programme in co-operation between the Confederation of Norwegian Business and Industry, The Norwegian Confederation of Trade Unions, Innovation Norway and NRC.
- The main objective of this programme is to encourage and contribute to organisational development and innovation, both within individual enterprises and in learning networks between enterprises, based on new forms of co-operation between the industrial (social) partners and other actors of significance in the value creation processes.

Research-based brokering



- Origin:
 - The 'TEFT' program (Technological dissemination from research institutes to SME's); from 1994-2003.
 - technological innovations and the relationship between firms and research environments.
- Research-based brokering had a wider emphasis in terms of the type of innovation that it promoted; here, organizational and market-level innovations were also emphasized.
- And promote the development of regional partnerships (Jakobsen and Døving 2006).
 - In 2006, regional research-based brokering projects were initiated in all counties
- Main activity - to set in motion projects involving firms; a competence broker works with a representative for the firm to define a relevant research and development project as well as engage competent researcher(s) with relevant experience. .



VRI is an experimental program:

Developing new instruments/regional
innovative policy tools