A GLIMPSE INTO THE NORWEGIAN CLUSTER PROGRAM: SOME WHATS, WHYS AND HOWS

Dr. Åse Kaurin
The Research Council of Norway
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MINISTRY OF TRADE, INDUSTRY AND FISHERIES

MINISTRY OF LOCAL GOVERNMENT AND MODERNISATION

ALLOCATE

MANAGE

INNOVATION NORWAY

THE RESEARCH COUNCIL OF NORWAY

SIVA

INNOVATION AGENCIES: LINKING ROLES AND RESOURCES
THE 3 AGENCIES WHO OWN THE PROGRAM

INnovation Norway

Owned by the Ministry of Trade, Industry and Fisheries (51%) and the county authorities (49%), IN is an instrument for innovation and development of Norwegian enterprises supporting companies and networks in developing their competitive advantage and to enhance innovation.

siva

Siva is a public enterprise owned by the Norwegian Ministry of Trade and Fisheries. Siva facilitate innovation by building, owning and developing infrastructure for industry, startups and research environments.

The Research Council of Norway

Owned by The Ministry of Education and Research RCN seeks to promote an integrated R&D system that supplies high-quality research and research-based innovation.
WHY SUPPORT CLUSTERS?

• No innovation without collaboration!
• Cluster collaboration give companies new ideas and access to partners
• Companies taking actively part in organised clusters, perform better
• Dynamic clusters create the best environment and opportunities for entrepreneurs
• Together, companies can solve challenges too big and/or too costly for a single company (e.g. education)
• Clusters as drivers for regional development
Program ultimate goal:
Increased competitiveness in regional clusters through long-term internal and external collaboration between companies, R&D- and educational institutions and governments

From research to invoice
**PROGRAM OUTLINE**

**Norwegian Innovation Clusters: 3 levels**

- **Arena**
  - Immature cluster initiatives
  - Regional position
  - 3-5 years
  - ZAR 3.7-5.6 mill
  - ~20
  - Annual open competition – 5 criteria – external evaluation by experts

- **Norwegian Centres of Expertise (NCE)**
  - Mature clusters
  - National position
  - 5-10 years
  - ZAR 7.5-9.4 mill
  - ~10

- **Global Centres of Expertise (GCE)**
  - Mature clusters
  - Global position
  - Up to 10 years
  - ZAR 15-18.8 mill
  - 4-5
HOW TO COOPERATE: 4 STRATEGIC AREAS (where to spend money)

1. Cluster development
2. Collaborative innovation
3. Knowledge linkages
4. Cluster-to-cluster

Increased value creation

Strategic positioning
1. Arctic Maintenance
2. BioTech North (ocean ingredients)
3. Arctic Winter Adventures
4. Cod Cluster
5. Arctic Maritime Cluster
6. Mineral Cluster North
7. Oil&Gas Cluster Helgeland
8. iKuben (process industry)
9. Norwegian Rooms
10. LEGASEA (ocean ingredients)
11. DesignArena
12. Norwegian Smart Care Cluster
13. USUS (tourism)
14. Subsea Valley
15. Oslo EdTech Cluster
16. Norwegian Fashion Hub
17. Heidner (biotech)
18. i4Plastics
1. NCE Aquaculture
2. NCE Instrumentation
3. NCE Tourism
4. NCE Seafood Innovation Cluster
5. NCE Media
6. NCE Maritime CleanTech
7. NCE Culinology
8. NCE Eyde (process industry)
9. NCE Micro-and NanoTechnology
10. NCE Smart Energy
11. NCE Systems Engineering Kongsberg
12. NCE Oslo Cancer Cluster
13. NCE Health Technology
14. NCE Raufoss (manufacturing)
GCE-SUPPORTED CLUSTER
01.JUNE 2016

1. GCE Blue Maritime
2. GCE Subsea
3. GCE NODE
THE SELECTION PROCESS (A COMPETITION BASED ON QUALITY NOT SECTOR)

- Call
- Information meeting
- Project development
- Selection criteria

- Project draft
- Complete application
- Implementation
  - Formal decision
  - Principal decision
  - Program Board
  - Expert panel

Feedback

[----------------------------- 5-6 month period -----------------------------]
5 SELECTION CRITERIA

1. Cluster resources
   • Companies, labour market, established collaboration with research and educational institutions, common interests

2. Position and potential
   • A recognized position regionally, nationally or globally and a potential for renewal, innovation and growth and can mobilize actors and resources

3. The project; goals and strategies
   • Measurable and verifiable goals, the «red thred»: a logical coherence between needs-goals-strategies-activities

4. Ownership, leadership and interactions
   • Project management, steering committee/board, commitments

5. Implementation
   • Activities, budget, roles/responsibilities, capacity
And the winner is...........
CLUSTER ORGANIZATION

Steering Committee

Cluster managers

Partnership (partners and members)

Cluster organisation

Strategic platform

Maritime CleanTech West

Hege Økland og Nils Aadland
INTERNATIONALISATION OF CLUSTERS

- All cluster projects are required to have a strategy for internationalisation of the cluster
  - Linking up to other clusters
  - Linking up to R&D/universities
  - Market information
  - Technology/market trends
  - Study tours/exhibitions
PROGRAM SUPPORT

- **Financial support**: 50% co-funding with cluster partners: Facilitation, strategy development, networking, branding, pre-studies
  - Commitment from industry is essential; cash speaks
- **Advisory services**: Experienced project advisors
- **Capacity building**: Courses, seminars, study trips
- **Networking**: Between cluster projects, transnational cooperation
- **Profiling**: Cluster branding and communication
PROGRAM SUPPORT – ADVISORY AND COMPETENCE SERVICES

- Program Managers
  Arena NCE/GCE

- 13 Regional representatives
  The Research Council of Norway

- Regional representatives
  SIVA

- Contracts, strategic dialogues
- Funding, daily follow-up
- Internationalisation – strategies and projects
- 8 Cluster advisors IN Regional offices
- 44 Offices abroad

- The strategic platform
  The steering committee
  The facilitator
  The partnership
  Partners/members

- R&D linkages
- Infrastructure
## MONITORING OUTCOME

### Activities and outcomes

<table>
<thead>
<tr>
<th>Activity</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Innovation projects based on cluster processes</td>
<td>48</td>
<td>175</td>
<td>152</td>
</tr>
<tr>
<td>11 - In collaboration with R&amp;D</td>
<td>30</td>
<td>93</td>
<td>100</td>
</tr>
<tr>
<td>12 - with international partners</td>
<td>36</td>
<td>72</td>
<td>47</td>
</tr>
<tr>
<td>13 - joint applications for R&amp;D&amp;I funding</td>
<td>30</td>
<td>80</td>
<td>75</td>
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### Participation

<table>
<thead>
<tr>
<th>Type</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Partner/core companies</td>
<td>235</td>
<td>262</td>
<td>317</td>
</tr>
<tr>
<td>2 Other participating companies</td>
<td>150</td>
<td>230</td>
<td>213</td>
</tr>
<tr>
<td>3 R&amp;D and educational institutions</td>
<td>45</td>
<td>61</td>
<td>69</td>
</tr>
<tr>
<td>4 Public/Other partners</td>
<td>193</td>
<td>199</td>
<td>210</td>
</tr>
<tr>
<td>5 Steering committees - % female repr.</td>
<td>18</td>
<td>25</td>
<td>28</td>
</tr>
<tr>
<td>6 Participants in committees/working groups</td>
<td>275</td>
<td>427</td>
<td>578</td>
</tr>
<tr>
<td>7 Organised foras/seminars</td>
<td>101</td>
<td>131</td>
<td>142</td>
</tr>
<tr>
<td>8 Participants in foras/seminars</td>
<td>2414</td>
<td>3620</td>
<td>4235</td>
</tr>
<tr>
<td>9 Foreign participants</td>
<td>27</td>
<td>57</td>
<td>80</td>
</tr>
</tbody>
</table>
Statistics Norway: Cluster companies have significantly higher growth in turnover and number of employees.

- **558** innovation projects of which **280** research
- **214** joint internationalisation projects
- **500** joint competence projects
- **192** Cluster to cluster projects
- **2070 companies**
  - *Every company: 15 new joint relations*
- **366** R&D&E inst(generic)

**36 clusters**

- **~ZAR 265 mill** for supporting clusters
- **~ ZAR 43 mill** to run and develop the program
Clusters as drivers for transformation

COMPETENCE DEVELOPMENT

CENTRES FOR RESEARCH-BASED INNOVATION

INTPART

Innovation Express

Collaborative innovation scheme

Knowledge linkages

Cluster-to-cluster

Cluster development

Increased value creation and attractiveness

Strategic positioning

Business Network program

Incubator program
Cluster initiatives are important in regional and national innovation strategies.

Clusters are drivers for new education in colleges and universities.

Clusters are drivers for research in companies.

A growing awareness in the business community to form partnership – and a growing willingness to invest in cluster development.