

WELCOME TO THE CHAMPIONS LEAGUE



Anne-Grete Ellingsen
Cluster Manager
GCE NODE

As NODE receives Global Center of Expertise (GCE) status, the effects for NODE and the region of Agder can be tremendous.

- Welcome to the Champions League of Norwegian business clusters, said Monica

Mæland, Minister of Trade and Industry, as she on June 18th revealed that NODE was promoted as one of the two first clusters ever to the newly created, highest level of Norwegian business clusters.

With the GCE status comes MNOK 100 in public funding over the next 10 years. This will enable us to further develop the cluster and to secure even greater emphasis on research and development as we strive to maintain our position as a world-leading cluster.

The strong links and excellent cooperation between NODE and the University of Agder and other academic institutions were among the reasons for granting NODE GCE status. We will continue to develop existing relationships as well as establish new relationships with international universities and research institutions.

GCE was one of NODE's «Big 3» goals for 2014. The other two goals are establishing a Center for Research-based Innovation (CRI) in the region, and a national pilot test laboratory, currently named «Sørlandslab».

A CRI could result in MNOK 200 for funding research in the Agder region, which would promote Agder's entire research milieu to the «Champions League». An answer to our application is expected in November.

If Agder is granted a CRI, it will increase the likelihood of receiving public funding for the Sørlandslab project, in which NODE companies have already committed spending MNOK 50 for research.

Both Sørlandslab and a CRI would strengthen NODE's position in established markets, and facilitate adapting current technology in new markets, thereby diversifying NODE's activity.

As we briefly celebrate our newly received GCE status, we continue to work relentlessly promoting the opportunities that lie in establishing Sørlandslab and a CRI in the Agder region.

As for our «Big 3» goals, they are easily summarized: One down, two to go!



On June 18th NODE received status as a Global Center of Expertise. Rita Schage, Innovation Norway, Agder (left), NODE's Cluster Manager Anne-Grete Ellingsen and Minister of Trade and Industry Monica Mæland. Photo: Terje Borud/Innovation Norway

NODE RECEIVES GLOBAL CENTER OF EXPERTISE STATUS

On June 18th NODE was officially awarded Global Center of Expertise (GCE) status.

- We are extremely happy. This is a great recognition of the hard work of all NODE-companies and their employees over a number of years. It is also recognition of how our world-class companies find ways to cooperate even with their strongest competitors, says NODE's Cluster Manager, Anne-Grete Ellingsen.

Eight Norwegian business clusters applied for GCE status. Only two, NODE and Maritime in Ålesund, were promoted to this newly created, highest level of business clusters.

NODE's board chairman and CEO of National Oilwell Varco, Tor Henning Ramfjord, applauds the efforts of both Kjell O. Johannessen (former Cluster Manager) and Anne-Grete Ellingsen.

- On behalf of the entire organization and the member companies, I am both proud and happy, says Ramfjord.

GCE-status was awarded NODE by The Norwegian Programme for Cluster Development after a review by an international panel of experts. In a statement, The Programme for Cluster Development says:

- NODE is a very strong cluster with world-leading companies within its niches. NODE's GCE ambitions are solid and aimed to strengthen the cluster in order to maintain and expand the world-leading position it enjoys today. NODE also looks to identify other business areas in which it can develop world-leading technology based on the cluster's competencies.

There are three levels of business clusters in Norway: Arena, National Center of Expertise (NCE) and Global Center of Expertise (GCE).

NODE started as an Arena-project in 2006 and was promoted to NCE in 2009. NODE was the first Norwegian Cluster to receive the European Cluster Excellence Initiative's «Cluster Management Excellence Label GOLD» (2012).



NODE's Cluster Manager Anne-Grete Ellingsen, former Cluster Manager Kjell O. Johannessen (center) and Board Chairman Tor Henning Ramfjord celebrate NODE's status as a Global Center of Expertise.

- CONGRATULATIONS, NODE!



Arvid Grundekjøn, Mayor of Kristiansand

We are very proud of what the 62 companies forming the NODE cluster have achieved in terms of developing and delivering the world's best solutions for the oil and gas industry regarding «drilling packages» and other equipment. Around 15,000 jobs have been created by the NODE companies in Norway, and our region has benefited directly and indirectly from the competence and creativity that these fantastic companies represent. The municipality of Kristiansand look forward to supporting and cooperating with this excellent Global Center of Expertise also in the years to come, as NODE represents a key factor for the further development of our city also in the future. Congratulations!



Rita Schage, Innovation Norway, Agder

GCE status is given only to clusters with companies that are world-leaders in their field and have the potential, ability and willingness to grow. After tremendous growth within the NODE cluster in recent years, it was especially difficult for NODE to convince the GCE jury that the cluster still has a huge untapped potential. NODE's convincing strategy for where and how future growth can be realized, and NODE's historical ability to deliver excellent results on their goals, resulted in a classification given to only the very, very best. Many of us are highly impressed by NODE's achievements and look forward to what is next. Congratulations, NODE! This is well deserved!



Siri Mathiesen, Regional Director, Confederation of Norwegian Enterprise (NHO Agder)

We congratulate NODE as a cluster and NODE's member companies on this wonderful achievement. This is the result of setting an ambitious goal, thinking long-term and working very hard. GCE status is a valuable recognition that also provides excellent opportunities for further developing cooperation among Southern Norway's technology companies and suppliers to the oil and gas sector. This is not only important for all the companies in the cluster, but has great significance for businesses in the region in general, as almost one third of the region's value creation is related to the oil and gas sector.



Siren M. Neset, The Norwegian Research Council, Agder

NODE has revealed itself as a cluster with all the ingredients that are expected from a GCE. It comprises a significant amount of enterprises, both large international companies as well as small and medium businesses that compete when necessary and cooperate when possible. The enterprises have an excellent cooperation with the University of Agder, and the cluster development is led by highly competent management. Baring all this in mind, we see that there is great potential for even more cooperation with relevant international universities to improve the cluster's research based innovation. We believe more research as well as more education on all levels will be a prosperous route to take for NODE in the future. We are looking forward to seeing NODE as a demanding customer to the Research Council's oil and gas-related research programs and wish the cluster participants all the best in their global competition.

MACGREGOR BUILDS A RECORD-SETTING CRANE

The world's largest heave-compensated subsea crane is currently being constructed by MacGregor in Kristiansand. The cylinder-luffing box-boom crane will lift up to 900 tons and operate loads to depths of 3,500 meters below sea level.

- The crane has been designed and engineered by our team here in Kristiansand. We have combined our technical expertise with intelligent use of materials and state-of-the-art components, says Bjørn Fossetøl, Director of Engineering at MacGregor in Kristiansand.

He stands by the crane's winch, which is almost 10 meters tall and holds 3,500 meters of cable. The winch will be equipped with 48 motors, 24 on each side, to ensure top precision in all conditions.

The crane will be delivered to Hyundai Heavy Industries shipyard by December 2014 and will be installed on a MUSD 150 multi-purpose offshore construction vessel ordered by Sealion Shipping, a UK-based offshore support company.

- This is definitely the biggest crane we have ever engineered and built. However, we are certain that we can set a new record as we see offshore operations moving to increasingly greater depths while subsea modules are getting larger and heavier, says Fossetøl.

MacGregor in Kristiansand supplies between 20 and 30 large subsea cranes annually to its global market.



Bjørn Fossetøl (left), Director of Engineering at MacGregor in Kristiansand and Alf Rune Andersen, Senior Project Manager at MacGregor in front of the winch for the record-breaking 900 ton subsea crane.

MACGREGOR CRANE WINS INNOVATION AWARD

Earlier this year, MacGregor won the 2014 Offshore Support Journal's Innovation of the Year Award. The award was given for the development of an offshore crane featuring full three-axis motion compensation enabling it to carry out extremely precise load handling. The crane will operate in the offshore renewable energy and oil and gas markets for Siem Offshore.

INTERNATIONAL WELDING ENGINEER COURSE PROGRAM AT UNIVERSITY OF AGDER



The University of Agder has secured the rights to train international welding engineers (IWE).

- This is very important for NODE companies. There was a real danger that the program would no longer be offered in Norway, but the university has yet again demonstrated its ability and willingness to meet the needs of the industry in the region, says Anne-Grete Ellingsen, Cluster Manager for GCE NODE.

- The course is intended to meet the industry's need to develop and document competency in welding and material issues. The NORSOK standards M-601 (piping) and M-101 (structures) require that welding coordinators are qualified and have certification as an International Welding Engineer, says Tor John Rødsås, IWE-coordinator at UiA.

The course plan allows the study to be combined with a fulltime job.

The duration of the entire course is 10 months. Upon completion the student will be credited with 30 ECTS. Start-up for the first class will be late autumn 2014. The course fully meets the requirements for IWE training as laid out by the International Institute of Welding.

The course is comprised of a week of practical welding, 4 theoretical modules and a thesis which is an individual project completed over 4 weeks. The classes and exams are held during the weekends, reducing the need for students to take leave from work. The rest of the course is an interactive study following the «distance learning route».

The study is an additional building block to a Bachelor's degree, which requires that candidates must have completed a Bachelor's degree before they can be accepted to the course.

For more information about the IWE-program, please contact Tor John Rødsås at iwe@uia.no.

WELCOME TO THE FIRST GLOBAL OUTLOOK NORWAY

Arendal is the place to be in mid-August, as top international speakers come to address global trends and challenges specific to the oil and gas industry.

Global Outlook Norway is the new arena to discuss key global challenges and how they influence business. Find inspiration as international speakers address global trends, threats and opportunities.

How do we deal with climate change, resource scarcity, energy security and poverty? How can your business properly prepare for the future, and how can we all contribute to meet these global challenges?

Top international leaders are increasingly concerned about the environment. They look to make the right choices through sustainable investments and innovation and more efficient use of energy. How will this affect your business?

This is the first edition of Global Outlook Norway. The conference is initiated by the three Norwegian business clusters GCE NODE, Eyde-nettverket and Maritimt Forum, and is funded by the Norwegian Ministry of Foreign Affairs.

The Norwegian Minister of Foreign Affairs, Børge Brende, will open the conference.

After the main session, NODE and The Norwegian Oil and Gas Association will host a session to address challenges specific to the oil and gas industry. The Norwegian Minister of Petroleum and Energy, Tord Lien, will open this session.

Global Outlook Norway is held in conjunction with Arendalsuka, a well-known week-long political and societal debate oriented event. Registration opens on June 15th.

See www.globaloutlook.no for more information.



MENTORING PROGRAM OPEN FOR APPLICATIONS

NEW continues their successful mentoring program for men and women within the NODE and Eyde networks.

NEW Mentor is now looking for both male and female protégées for their unique leadership program in the crossroads between the clusters and their members. We are looking for candidates fairly new to their leader position, approximately 1-3 years of leadership experience, possessing the drive and motivation for development and a desire to build a professional network between the clusters in the region.

- NEW Mentor offers new arenas for cooperation that contribute to both professional and personal development. Such projects are positive both for the individual and for the companies. Cooperation is to the Eyde-cluster one of the most important tools in working for a sustainable process industry, says Helene Fladmark, Eyde's Cluster Manager.

- The NODE Cluster offers an international environment with broad possibilities for development. Diversion and different perspectives increase the ability for innovation. NEW is an important network in this process, and the mentoring program is a suitable tool to clarify ambitions, career opportunities and need for development, says Anne-Grete Ellingsen, NODE's Cluster Manager.

The program starts October 16th and lasts until April 2016. Both the protégé and the mentor will meet on a regular basis during this period for conversations in private. The general part of NEW Mentor will consist of 4 professional gatherings for both mentors and protégés in addition to the kick-off and the conclusion of the program.

- As a leader you are often on your own in numerous choices and decisions. The possibility to create and experience such a close relation with an independent sparring partner has been very enriching, says former NEW Mentor protégé Bjørn-Tore Lenes in Origo Solutions.

The closing date for applications is August 31st. For further details regarding the program, please refer to the NODE and Eyde homepages or contact NEW Mentor leader gro.wickstrom@siemoffshore.com.

Do you have any queries for those participating in the first NEW Mentor programme, please feel free to contact: Bjørn-Tore Lenes in Origo Solutions: bjle@origo-s.no, Reidun Brottveit in NOV: reidun.brottveit@nov.com, Kjersti Ruud in Glencore: kjersti.ruud@glencore.no



From left: Kjersti Ruud (Glencore), Katarina Kielland (Cameron - front), Siri Tønnesen (GE Healthcare - back) and Reidun Brottveit (NOV)

MORE R&D IN NODE

NODE companies spend more time and resources on research and development than previously reported.

This is the conclusion in a preliminary report from an R&D-study conducted by Teknova on behalf of NODE. The study shows that NODE companies spend 0.4% of their revenue on R&D and 0.5% on innovation. This is higher than estimates from Statistics Norway (Statistisk sentralbyrå).

90% of the companies say they regard R&D as important or very important. 2 out of 3 companies do their own R&D and 3 out of 4 companies do their own innovation.

The preliminary report is based on data from a third of the NODE companies. However, taking size into account, these companies comprise two thirds of the cluster.

A final report will be issued when a higher percentage of companies have submitted their data.



AWARDED NODE PRIZE FOR MASTER THESIS

During the June 17th graduation ceremony at The University of Agder in Grimstad, Johan Lindal Haug was awarded NODE's prize for the best mechatronics master thesis.

Haug received NOK 10,000 from NODE for his thesis on development of a vision-based measurement system for relative motion compensation.



- Experiments have shown that under static conditions the vision-based measurement system detects the heave distance with less than 0.5 mm deviation at a distance of 2.3 m, and roll and pitch angles of the pattern are computed with less than 0.2 degree deviation, explains Haug.

The NODE prize was established several years ago to honor the efforts of outstanding students of mechatronics at The University of Agder.