

CenBio Innovation Workshop

Trondheim, 17 November 2010

To emphasise the fact that CenBio has innovation on the agenda 21 industry and research staff joined an innovation workshop in Trondheim 17. November 2010. One of the objectives was to inspire, discuss and plan how the centre can meet its target of 25 innovations.

Pink Floyd

Kristian Lien, Ceoto As, told us how we can learn from the innovation process in the band Pink Floyd when they made their famous album Dark side of the moon. We must dare to grab the idea that appears from almost nothing, to improvise with it and to involve a group of people in it. No idea can grow in one brain alone. Knowledge and skills makes the platform, but there is something about how we use these in team play with other people that creates something new.

Mental ownership

Robert Næss, NTNU CenSES, presented several definitions of innovation as well as several innovation models. He defined radical innovations as technology break-through, something new in the world. Innovation is much more than an invention, it needs competence, infrastructure, standards, regulations, and of course a market. In CenBio we have to document facts, build the innovation step by step and create mental ownership to it. Of the time spent over an innovation period 40% is research work and 60% is missionary work. Clear and well documented arguments are necessary to create credibility. And we have to be very patient and persevering, an innovation process can last for many years.

A stubborn and playful owner

Paal Jahre Nilsen, Cambi AS, underlined that it needs a stubborn and playful owner who can earn money somewhere else while waiting for a new technology and market take-off. He recommended us to admit that we don't know the answer on all questions, and that we have to never give up solving a problem. To innovate means to generate ideas all the time, to protect them early and to have clear decision points. Jahre Nilsen thinks scientific articles are important deliveries in innovation processes. They represent neutral and objective documentation, and they are important to build credibility. Cambi includes scientific papers and reports in their own website. Not only documents from own projects, but also from other research projects that bring relevant information and knowledge. Students doing relevant studies are heartily welcome, they bring new ideas and make reports useful for the innovations.



Paal Jahre Nilsen, Cambi As

From ad-hoc to program

Morten Fossum, Statkraft / Trondheim Energi Fjernvarme, tells that innovations come easier when long term bonds have been established between industry and research institutions. Everything is easier when we know each other. So far Statkraft has had an ad-hoc problem solving strategy, and no long term innovation strategy. Now this has changed. A four year R&D and innovation program has been put in place. The program constitutes a unit of its own making innovation a clear part of the company's core business. Fossum underlines the importance of the whole bioenergy value chain competence present in CenBio. Interdisciplinary actions between the links in the chain are arenas for creativity and innovation. Also in Statkraft students are welcome, both to perform thesis and do summer jobs, for example as clear part of the CenBio Graduate School.



Morten Fossum, Statkraft AS

Fight for it

Edvard Karlsvik, SINTEF Energi and Simen Gjølshjøl, NFLI pointed out the importance of listening carefully to the industry and being a good support over time. Industry key persons who are willing to fight for an innovation are a must, this is easy to forget. Transferring methods and technology from other industry sectors are often smart and cheap ways to create innovation that improves the economic profit.



Edvard Karlsvik, SINTEF Energi and Simen Gjølshjøl, NFLI

Group work

Group work and discussions – some outputs:

- look for innovations in CenBio annual work plan
- make our invisible innovations visible
- several small innovations can make one big
- an innovation might be a product, a technology, a component, a process or part of such, a model, a service or new application of existing knowledge

CenBio innovation strategy

The experiences, ideas and proposals from the workshop will be used for developing a CenBio innovation strategy as planned in CenBio annual work plan.

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