

Summary and conclusions - What have I/we heard?

- Global energy demands will be the major driving force for exploitation of o&g resources in new regions
- There will be changes in and increased shipping activities in arctic areas and along coastlines
- **Accidents will happen!**
- **We need a mind change!**
- The SET plan lacks for oil spil response – what is our vision?!
- If you want to change something – start with yourself! Be inspired – be bold!
- This is an international challenge calling for international cooperation! National collaboration on the charts
- There is a lack of innovation! Open innovation processes are crucial to achieve the goals!
- More radical than incremental development is probably needed
- Boost creativity by mixing people with knowledge of the problem and those with knowledge of geeneric sciences
- And – we have to make this business attractive to the big innovation locomotives!
- Substantial national/federal fundings must be made available
- There is a need for knowledge! The "market" for knowledge is growing! And the knowledge (existing and new) need to be communicated – information spreading (web based room for information)
- Technical, political and reputational factors are all important

Summary & Conclusions cont. – "Challenges, gaps and possibilities"

- Good strategies, Crisis management, We have to be prepared with approved technologies whenever this will be needed!
- Work with the environment
- Arctic
 - Environmental conditions (darkness/low light, low temperature, remote)
 - Behaviour of oil in ice – fate ,WSC
 - Recovering oil under ice
 - Further develop existing methodologies (isb, dispersants, mechanical)
 - Lack of baseline and input data with high quality (metocean, ecosystems, real time) – should be more coordinated and to cover wider areas
 - Validate models
 - Proof of concepts and field verifications
- Coastal areas and shorelines
 - Resource demanding manual operations
 - Crawlers , sand sharks, gobblers,.....
 - Self cleaning methods (OMA, surfwash, tilling, ...)
 - Reduce and handling of waste

- Concern about educating the next generation oil spill respons technologists

Way forward?

- Do you share my opinions - did you hear the same things? Additional issues
- What did you miss during this Conference?
 - More focus on proven technologies and technical thoughts
 - More concrete discussions on the way forward – which issues do we give priority
 - Russia and East Greenland should have more focus in future events
- How could we use of different initiatives like OGP/IEPCA , USCG, JIPs and other on-going initiatives to achieve the goals?
- Was it worth your trip to Hell?

We wish you all a safe trip home – many thank's for your contributions



Technology for a better society