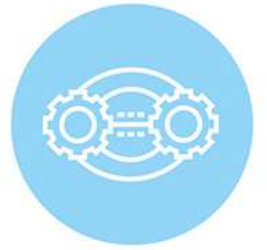




Introduction to Crossover project and new Solutions in Global Aquaculture

15.08.2017

Mother of Invention

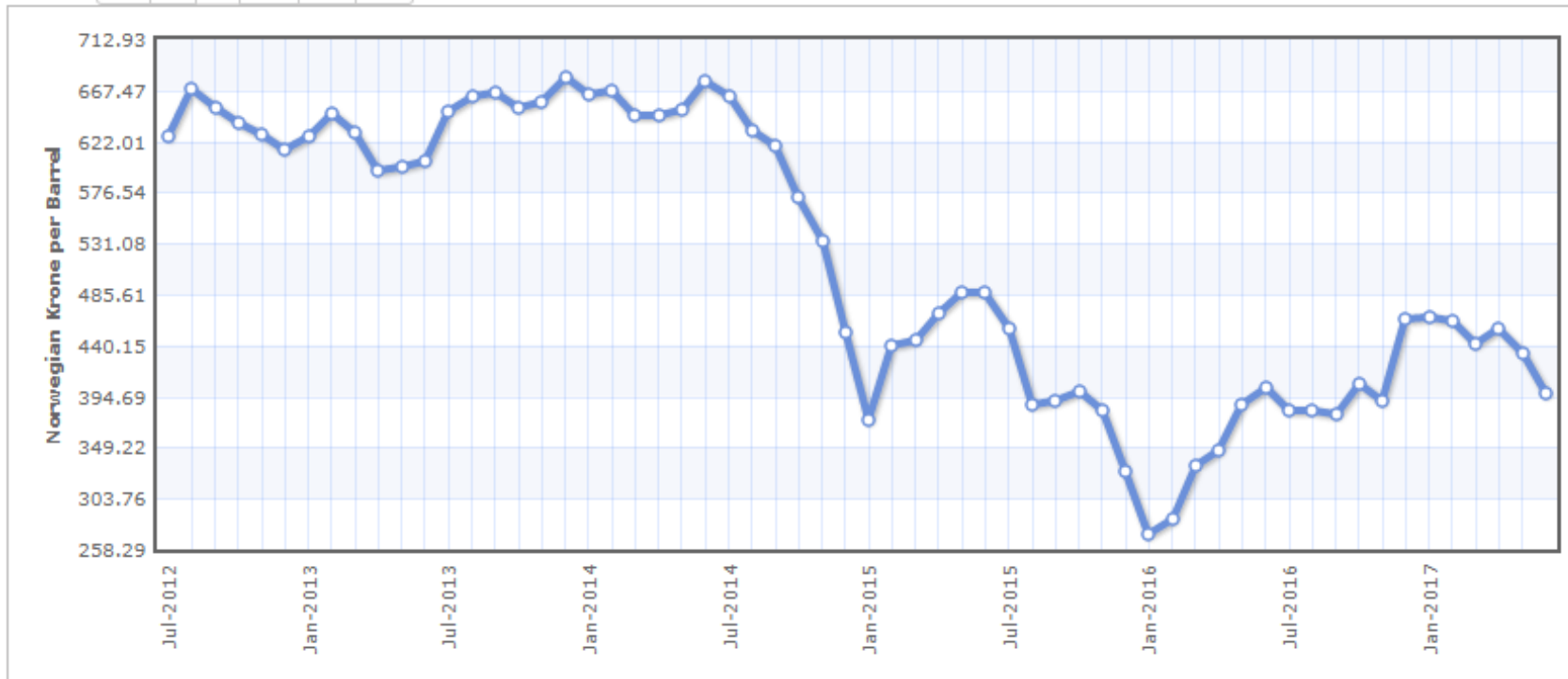


Supplier
Development

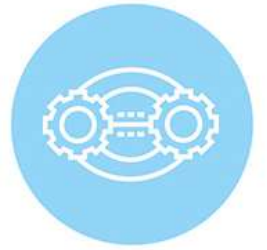
Crude Oil (petroleum); Dated Brent Monthly Price - Norwegian Krone per Barrel

Range 6m 1y 5y 10y 15y 20y

Jul 2012 - Jun 2017: -229.537 (-36.64 %)



Mother of Invention

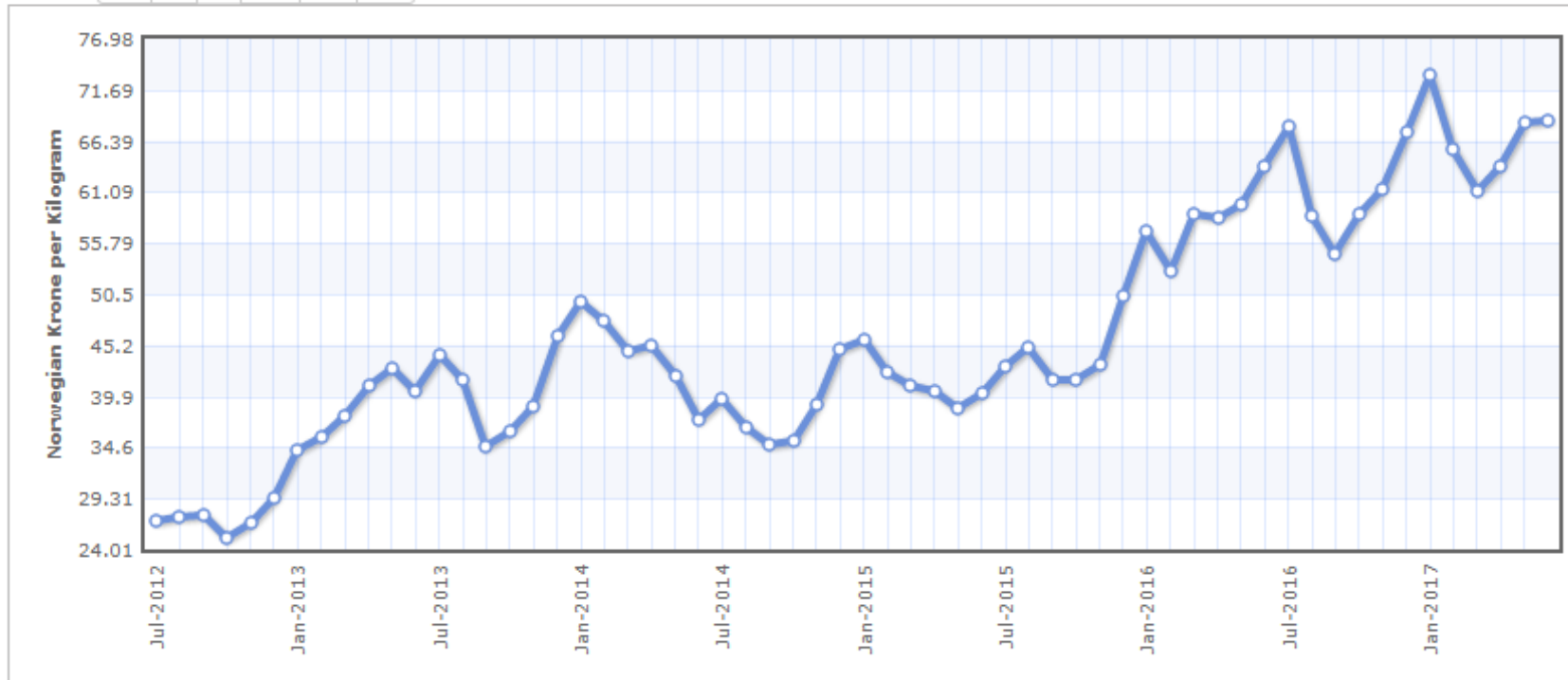


Supplier
Development

Fish (salmon) Monthly Price - Norwegian Krone per Kilogram

Range 6m 1y 5y 10y 15y 20y

Jul 2012 - Jun 2017: 41.594 (154.24 %)



Oil & Gas meets Aquaculture - The project

- Cluster-to-cluster project initiated autumn 2015
 - GCE Subsea + NCE Seafood Innovation
- Sponsored by Hordaland County
 - Phase 1: 300.000 NOK
 - Phase 2: 763.000 NOK
- Facilitated by Deloitte
- Knowledge partner: Kontali Analyse (NCE Seafood Innovation partner)



Global Centres of Expertise
GCE Subsea



Norwegian Centres of Expertise
NCE Seafood
Innovation Cluster

Deloitte.



HORDALAND
FYLKESKOMMUNE



Norwegian Centres of Expertise
NCE Seafood
Innovation Cluster

Oil & Gas meets Aquaculture - The project



Global Centres of Expertise
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NCE Seafood
Innovation Cluster

Aim: Explore and facilitate the possibilities for crossover between Oil & Gas and Aquaculture.

Deloitte.



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NCE Seafood
Innovation Cluster

Project Phases

- Phase 1 – H1 2016
 - Learning phase
 - Barrier identification and mitigation
 - Familiarization – excursion and workshop

• MYTHBUSTING



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Innovation Cluster

Project Phases

- Phase 2 – H2 2016 and 2017-Follow-up from phase 1
 - Visit subsea suppliers and fishfarmers to match ideas for innovation
 - Provide O&G suppliers with leads, entry points and introductions to the fishfarmers
 - Topical seminars/workshops to generate project ideas for further elaboration
 - Seafood introduced as topic at GCE Subsea Møteforum - Nov 2016
 - Sensor technology - Mar 2017
 - International seafood market – Planned Q3 2017



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NCE Seafood
Innovation Cluster

Project Phases

- Phase 2 – H2 2016 and 2017
 - Establish cooperation projects between fish-farmers, subsea suppliers and R&D
 - Several have applied/received GCE Subsea pre-project funding, e.g.
 - Biomass measurement
 - Automatic lice detection and counting
 - Flow simulation for enclosed technology for industrial fish farming
 - Business development programme – ACCEL Crossover from Oil & Gas to aquaculture. 8 companies participated.



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Project Phases

**Seminar at AquaNor
Trondheim – showcasing
some of the
projects/solutions**



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**NCE Seafood
Innovation Cluster**

Thank you!

Industry Partners:



R & D Partners:



Members:



Contributors:



Financial Partners:

