

Industrialising the production of large offshore fish farms

by Heidi Baugstø Chairman, Ocean Aquafarms







Hex Box Norway Design

Main Particulars:

Significant wave height: 10 m

Circumference: 250 m

Volume: 433.300 m³

Capacity salmon: 10.140 mT

Depth of net from MSL: 90 m

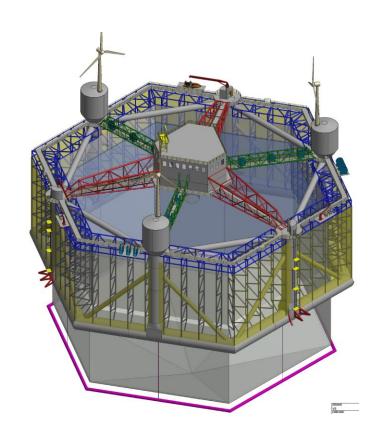
Living Quarters: 3-6 persons

Lightship Weight: 6.000 mT

Fish Feed Storage Capacity: 1.000 mT

Power Generation: Gen. set & windmills

Mooring: Fixed point mooring



The design can be scaled up or down to be used for different fish types and locations



Project Development Success in China





From Rigs to Fish

Safety Issues Hybrid Power Automation















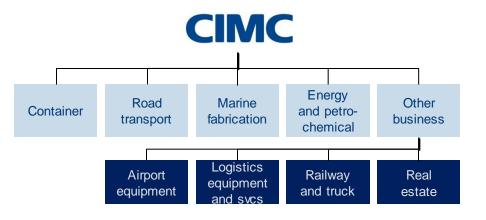
Market Potential

70% of the Earth's surface is covered by water, only 6,5% of the protein sources for human consumption is produced in this element.

Source Marine Harvest



Main suppliers



~63,000 employees across China, North America, Asia and Australia

CIMC is a strong Partner

- Industrialized container manufacture
- Industrialized airport equipment
- Industrialized railway and truck manufacture
- Strong marine fabrication expertise
- Logistics and other services



Kongsberg is a key supplier

- Best in class for marine systems
- Strong R & D development
- Aquaculture is a key business segment
- Long term relationship



Main suppliers





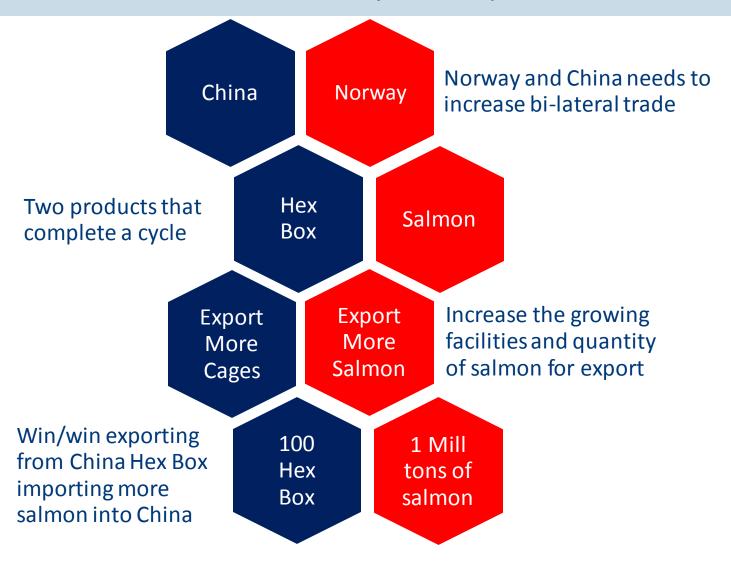
How to Industrialize a product

Mass production of the Hex Box Solutions:

- Partner with a company that has done it before
- Design and build an optimal cage for the future which is scalable
- Ensure that the design can be easily constructed by using standard products and working with the fabricator during the whole detail design phase
- Use the latest technology and make the design easy to upgrade
- Make the design transportable
- Incorporate automation and renewable energy

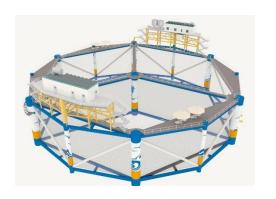


A Win – Win solution China/Norway – Example salmon





Cooperation has already started

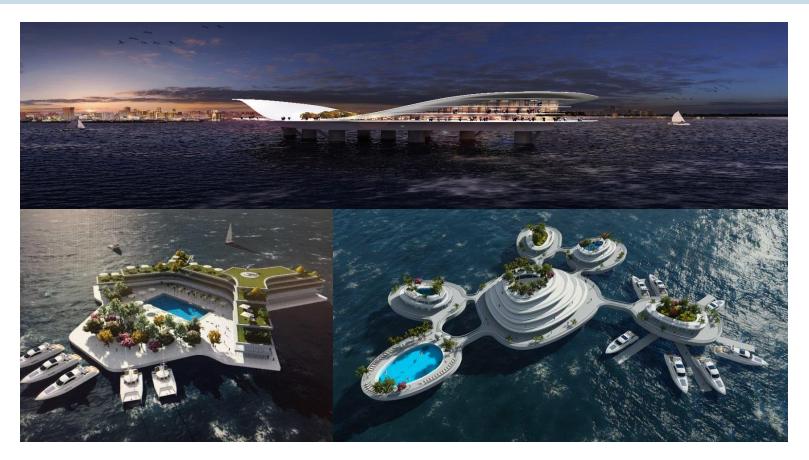




- CIMC Raffles and Ocean Aquafarms AS has established close cooperation in the aquaculture field. CIMC Raffles will perform the basic design, detailed design and production design of the Hex Box.
- They have developed two types of the fish farms suitable for the Chinese sea condition and the local fish farming.



The Ocean Space Future – combines fishing/leisure/tourism



The purpose of large offshore structures is to provide marine leisure, fishing and sea experience tourism opportunities. These facilities could provide dining, accommodation, travel, shopping, entertainment options and other functions.



www.oceanaquafarms.com