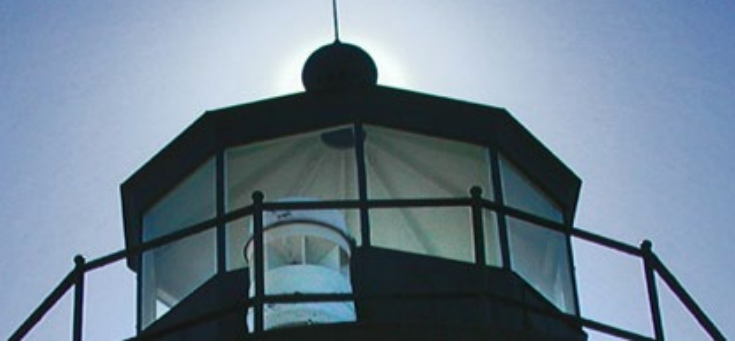


ICELAND OCEAN CLUSTER

THE GREEN FISHING VESSEL

In recent years Icelandic tech companies in the ocean industry have developed various types of equipment and mechanical devices that are environmental friendly and cutting edge. It is evident that the knowledge and experience of these companies should to be promoted internationally. These technical solutions which have been developed for use in fishing vessels contribute to higher efficiency of power sources, less oil consumption and higher utilization of raw materials.

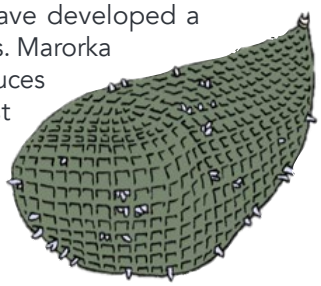
Collaboration of tech companies, major parties in the ocean industry and the government in a project called "the Green fishing vessel", can be a turning point in respect to more powerful marketing, boosting the image of Iceland as a leader in ocean industry and creating valuable jobs.

So what kind of solutions are we talking about?

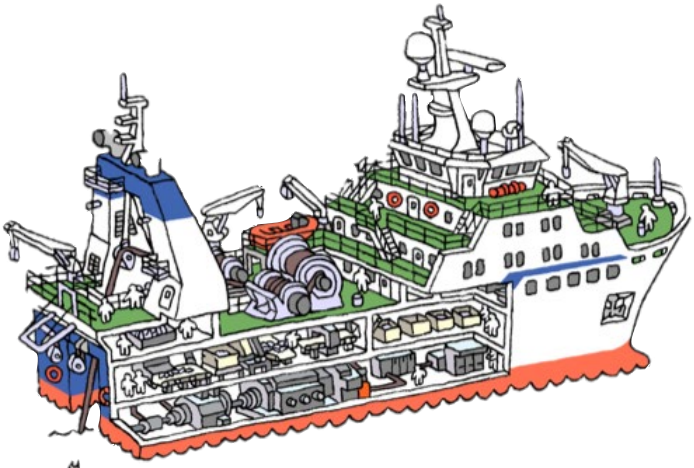
Many of the solutions for the fishing vessels that have been developed in Iceland have gone by unnoticed internationally because the companies are quite small and lack the critical mass they need to sufficiently market themselves. When looked upon closely you can see that this is true of a large group of companies and hence great opportunities waiting to be seized.

Engineering and consulting firms in the field of naval design and shipbroking such as Skipasyn, Navis, Alasund and Skipatækni have developed a range of technical solutions which increase operational efficiency and lead to energy saving on board. Skipasyn specializes in trawlers and has successfully designed ships with high torque per horsepower produced. Navis has designed highly automatic ships with good operational efficiency. Alasund has extensive knowledge of ships and for the past decades they have established a good network of business relations worldwide and traded more than 200 ships. Skipatækni is among the oldest companies in Iceland specializing in naval engineering.

Many of the technology companies have developed a world class equipment for fishing vessels. Marorka provides a power control system that reduces oil consumption, reducing fuel cost and pollution. HBT International has developed solutions regarding energy saving in ships. Polar fishing gear has developed controllable trawl doors which protects the seabed. Naust Marine has developed a system that controls and coordinates the power from the engines and additionally they manufacture world class electrical winches. DIS is a company that specilizes in sterilizing technology based primarily on environmental friendly detergents. Trackwell offers complete solutions in fleet management with special focus on energy efficiency.



Above mentioned parties are enthusiastic to collaborate and develop an ideal fish processing area – a fish processing workspace onboard the vessels. In Iceland there are numerous companies and institutions that excel in the field of fish processing technology, such as Marel, 3X, Traust, Matis and more. Additionally there are a few cooling companies that have achieved excellent results



in chilling of the fish, leading to better quality of the fish and energy saving onboard.

This is not a comprehensive list of companies but it shows without a doubt the opportunities that are present regarding designing and building of vessels, especially if the companies set themselves a common goal on how they can participate in the worldwide renewing of the fishing fleet.

Is there a need?

Oil consumption in Iceland in 2011 reached nearly 623.000 tons were the Icelandic fishing fleet used 159.000 tons or 25.5% of total consumption. It is believed that in the next few years the demand for new vessels and green technology will increase rapidly. The reason, among other, is higher utilization of raw materials, increasing value of the catch and technology which is all at once energy efficient, environmental friendly and value adding.

Recently the Iceland Ocean Cluster did an analysis on the unused opportunities regarding the solutions from these tech companies and how much money they could save for the customer. Oil consumption for fishing vessels in Iceland reaches 20 billion dollars on a yearly basis. Based on the information from the tech companies and tests they have been doing on their equipment and solutions, it is estimated that oil consumption can be reduced by at least 20% which adds up to 4 billion dollars per year.

New opportunities in the ocean industry

The Icelandic fisheries have shown a great interest in these new technology solutions but because of unfavorable taxation environment and a negative media coverage significant investments have been limited. The opportunity lies in the aforementioned project, "the Green fishing vessel". It requires, however, a combination of teamwork and investments, were the goal is to assemble a state of the art fishing vessel which could then be used as a pilot ship for the Icelandic fleet which contains the most advanced technology equipment available in Iceland.

If the business environment will improve in coming months it is obvious that the fishing industry needs to invest again and move ahead into a new era. It is urgent to achieve leadership when it comes to environmental friendly technology in fishing vessels. Once the project takes flight, there will be a new platform to launch a marketing campaign for the Icelandic design of the green fishing vessel. Simultaneously, Icelanders need to bring to attention to how far they have come in quality control, both in terms of harvesting and processing of the fish. There is an opportunity to create hundreds of well paid jobs if Icelanders will manage to gain a better foothold in terms of developing and selling green solutions for fishing.

About the Iceland Ocean Cluster

The Iceland Ocean Cluster began its existence as a research project in the University of Iceland in the spring of 2010. The goal of the I.O.C. is to increase the value of the companies operating in the cluster. Partners include leading firms within the ocean cluster, but by building and maintaining networks the IOC creates new opportunities for cooperation and innovation. At any given time the I.O.C. team is working on various project based on cluster ideology. Major projects in 2012 include establishing an advanced processing cluster in Reykjanes, joint marketing of tech firms and increasing service to foreign vessels in Iceland. For more information, please visit www.oceancluster.is