

SeaCult

Protection and life support for the sea

SPECIAL FOCUS / THE STRATEGIC PLAN AND RELATED STORIES FOR THE BUSINESS SECTOR

Making a profit for the good of the sea

SEACULT SEES BUSINESS OPPORTUNITIES IN SAVING AND REHABILITATING THE SEA

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SeaCult is combining industrial development in the offshore sector with preservation of the marine environment. The company's business idea can be split into two categories: direct development of the offshore industry (SeaCult Offshore) and the rehabilitation category (SeaCultivation).

SeaCult Offshore focuses on the direct developments of offshore industry, primarily wind farms. Industrial development offshore implies a large impact on the seabed. Therefore, SeaCult Offshore provides solutions such as underwater cable protection and an offshore windmill anti-erosion system to minimize the environmental impact.

Offshore installations such as oil and gas platforms and wind farms are constantly looking for the optimal way of laying cables to connect it to the shoreline. Instead of trenching the seabed, which causes damage, the cheaper and less devastating way of laying the cables is laying them on top with a cable protection made out of partially recycled concrete.

Windmills standing on the seabed are at risk of becoming unstable because of erosion. The traditional way of countering the challenge of erosion around the windmill base is by laying gravel. In cooperation with SINTEF, SeaCult has developed devices that are placed in a circle around the base at a distance from the windmill to stop sea currents from causing erosion. The solutions would enable sea life to continue to grow in cooperation with DONG in Denmark and other Scandinavian offshore industries, tests are currently underway at Hønsrøev, where a large offshore wind farm project is being developed.

Habitat will enable fish to grow on floating devices mid-sea. Such a product is particularly useful around offshore installations. Buoyancy is achieved by air-filled pipes or buoys.

NEW MARKETS EMERGING

The world is in need of new energy. The demand for cheap, and preferably renewable energy, is on the rise. In the next 10 to 20 years we will witness an explosion of offshore windmill farms providing electricity to millions of people worldwide. The developers of these energy farms are looking for solutions that are cheap, and if these solutions are sustainable, it will be a major bonus for the companies.

Offshore windmills are new territory, but offshore installations have long been placed for other commercial uses, such as oil and gas exploration. A large number of old offshore installations are and will be removed in the coming years. These installations have in some cases caused great damage to the marine environment, and rehabilitation efforts are needed. Industry, governments and marine biologists all agree on the need for action. However, the responsibilities are not yet defined and new requirements may be needed.

MORE ON SEACULT

Five years ago, SeaCult, in cooperation with the Norwegian Institute for Water Research (NIVA), Statoil, and Hammerfest Municipality, started a test project laying down artificial reef habitat to try to reinvigorate sea anemone life and create fry and fish breeding. Today these artificial reefs have laid the groundwork for a flourishing fry around healthy aquatic vegetation. The design has also prevented sea urchins from festering. The artificial reefs are only one of a series of uniquely designed solutions straddling the crossroads between environment protection and offshore industrial development.

Based in Tjønsberg, Norway, it is ideally placed for offshore-related business development, but the company needs allies in developing its products. This came in the form of cooperation with Scandinavian offshore industry and research communities. In particular, SINTEF, the largest independent research organization in Scandinavia, and NIVA, have both been working closely with SeaCult to help design sustainable offshore solutions for the energy industry, and also for rehabilitation projects.

SeaCult aims to ensure that offshore industries integrate their commercial and their environmental goals. The latter often comes at a cost for the first. By combining industrial needs with marine aquatic knowledge, SeaCult has carved out a new and important business niche for sustainable growth.

SeaCult is a business like any other—commercial success is key

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SeaCultivation focuses on the rehabilitation of seabeds damaged by industrial development or natural disasters resulting in destruction of seagrass and coral. In Hammerfest and in Dubai, the habitat test programs are showing considerable positive results (for a report on this project, please see: www.seacult.com).



words, the cheapest, most efficient way to achieve sustainable offshore development.

AN UPHILL STRUGGLE

As any emerging market, the commercial environment is challenging, and survival for any new company is on top of the agenda. A legal framework providing a sound industrial base and at the same time protecting precious sea life is essential for a sustainable future in the offshore sector. But such seabed legislation is still far off from being completed.

Despite varying legislative frameworks, being an entrepreneur in a new market provides for a large potential for suc-

cess. However, with a novel idea and strategic alliances, a company such as SeaCult can go far.

FOR THE GOOD OF THE ECONOMY AND THE ENVIRONMENT

The renewables industry offers a good solution to the growing energy needs of our economies. But windmills need space and wind. The oceans provide that, but not without environmental costs.

SeaCult tries to provide for sustainable growth in sensitive habitats while ensuring earnings for a sector struggling against cheaper electricity sources. However, there is hope

