

Final Draft

**THE BERGEN DECLARATION ON
NEXT GENERATION FISHERIES**

November 15, 2005

Whereas, fishing fleets need to travel greater distances for diminishing catches.

Whereas, some aquacultured products may suffer from the concentration of chemical toxins or drugs, and may be affected by diseases.

Whereas, the consumption of seafood is increasing relative to beef, chicken and pork, being stimulated by the growing human population and recognized nutritional benefits of bioproducts from the sea.

Whereas, the seafood industry faces increasing challenges posed by fish stock depletion worldwide and international fishing regulations.

Whereas, public forums and hearings on fisheries throughout the world focus primarily on developing measures to conserve natural marine stocks and associated sanctions for violators.

As all world fisheries are in various stages of decline, resulting in increased competition, rising seafood prices, and overall degradation of marine ecosystems.

But, that:

- **40% of all fish currently caught come from less than one percent of the ocean, where natural upwelling occurs and**
- **at depths below about 500 meters, cold deep ocean water with attractively high concentrations of nutrients ideally suited to promote growth in the photic zone if brought to the surface is readily available.**

The conferees, recognizing that:

- **the ocean thermal energy conversion (OTEC) technology which utilizes large volumes of deep ocean water can also be applied to power and fertilize the growth cycle for Next Generation Fisheries (NGF) in the open ocean in artificial marine systems which feeds themselves only with the additional input of solar energy; and**
- **a range of developmental initiatives, including caged offshore mariculture and the associated state-of-the-art technologies, will need to be explored and supported in a step-by-step bridging strategy to achieve artificial-upwelling-driven NGF.**

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And further, that the development of the NGF is ideally suited for international cooperation.

We, the conferees, hereby agree in principle to:

- **coordinate a long term program dedicated to understanding and operating NGF, to include the science, engineering, environmental, legal, political and economic / marketing factors;**
- **establish a systems framework for the effort;**
- **seek domestic funding to undertake the R&D best suited for the individuals and organizations interested in being party to the alliance;**
- **work together to explore mechanisms for international funding; and**
- **meet on a regular basis to exchange information, refine the mission and develop personal and organizational relationships.**

The purpose of this Declaration is to show a sense of spirit that the consignees will collaborate and coordinate their efforts. The document will also be a tangible product of the deliberations, and can be utilized to reinforce future discussions and to serve as evidence of past activity.

The conference planners are further urged to expand the international partnership, seeking additional input and the participation of appropriate individuals and organizations from throughout the world.

The conference planners will, within 6 months after the Conference, produce a systems framework for Cooperation on the Development of NGF, at which time an announcement for the third NGF meeting will be made. As the first meeting was held at the Japanese Ministry of Foreign Affairs in Tokyo, in 2004, and the second session was held in Bergen, Norway, the general sentiment of the conferees is that the third gathering will be held in the United States, probably Hawaii, early in 2007.

Listed below are the conferees who agree in principle with this Bergen Declaration for Next Generation Fisheries:

Jørgen Borthen, Martin Brown, George Crisan, Lars Golmen, Ingvar Huse, Jorge G. Gutiérrez, Stephen Masutani, Trond Rosten, Stein I. Steinshamn, Anne Stene, Leif M. Sunde, Patric Takahashi, Hernan L. Villagran, Brandon Yoza.

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