Proposal for an Algal Industry Cluster in Maine

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A biological resource that drives one of the great engines of planetary control.
NCMA: A Snapshot

- The world’s largest and most diverse living archive of marine microalgae.
- 35 years in the algae business.
- Started as a algal seed stock for the aquaculture industry.
- A repository for public and private collections of algae.
- 2720 strains of marine, brackish, hypersaline and freshwater algae; including cyanobacteria and macroalgae.
- 359 genera and 723 species.
- 17 products available for every strain.
- 5 growth temperatures (polar to tropical).
- On-site & off-site back-up and cryopreservation.
- Expansion to include new Bacteria and Virus collections.
- Federal, Industry and Bigelow support.

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VISION

To create a complete algal supply chain; from seed cultures to biomass infrastructure, processing, testing, and development of market opportunities; that will allow us to lay a foundation to stimulate algal economic development, and make Maine one of the top states in the U.S. to run an algal-based business. It will be a process driven by innovation, education, collaboration, and branding.
Current Steering Committee

CHAIR Willie Wilson: National Center for Marine Algae and Microbiota (NCMA)
Sebastian Belle: Maine Aquaculture Association
Mark Bloom: Bigelow Laboratory for Ocean Sciences
Nick Brown: Center for Cooperative Aquaculture Research
Dick Clime: CEI Capital for Opportunity and Change
Chris Davis: Maine Aquaculture Innovation Center
Paul Dobbins: Oceans Approved
Shep Erhart: Maine Coast Sea Vegetables
Don Gooding: Maine Center for Entrepreneurial Development
Jen Levin: Gulf of Maine Research Institute
Catherin Marin: Maine Technology Institute (MTI)
Sarah Redmond: Maine Sea Grant
George Seaver: Ocean Organics
Liz Solet: Maine Seaweed Institute
Sara Yentsch: NCMA
Overview of MTI

Maine Technology Institute (MTI)

Business Innovation Program (BIP)
- SBIR/STTR support
- TechStart Grant
- Seed Grant
- Development Loan
- Business Accelerator Grant (for DLS and SBIR/STTR)
- Equity Capital

Cluster Initiative Program (CIP)
- CIP Planning Award
- CIP Implementation Award

Maine Technology Asset Fund (MTAF)
- Awards for capital investments in R&D leading to commercialization

www.mainetechnology.org
Why a Cluster Initiative Program?

- Maine needs more than individually successful technology companies to have a competitive economy.

- Companies benefit from being linked to similar companies, near specialized workforce, and surrounded by industry/research resources that can help them thrive.

- Technology clusters are an important driver of business growth and economic development, leading to the creation and retention of good jobs.
What Exactly is a Cluster?

The term “Technology Cluster” is an organizing principle

Clusters have the following elements:

- **concentrations of companies** that typically serve related markets or a targeted need, and draw on similar knowledge and employee/workforce skills to develop innovative products and Services

- **supported by common organizations**: universities, trade associations, legal/financial services and government agencies

- **Relationships and the sharing of knowledge and skills** among such industry group are the key to being a cluster, rather than simply industry concentration

These elements lead to a **collective competitive advantage**
Four Cluster Elements

Knowledge Skills & Innovation

Production & Distribution

Entrepreneurship

Networks & Knowledge Spillovers

From Charlie Colgan’s presentation: “Tracking Cluster Evolution in Maine”
Timescale

• Planning proposal: Sept/Oct 2013
  • $50k – strategy development

• Implementation Proposal. March 2014
  • $500k – build industry cluster.
Questions and Comments

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