











The Clean Technology Sector in Maine 2013

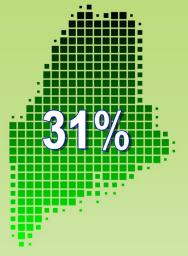
ANNUAL ECONOMIC IMPACT OF MAINE'S CLEAN TECHNOLOGY SECTOR—2010

	Direct Impact	Total Impact ¹						
Output	\$1.4 Billion	\$2.3 Billion						
Employment	12,212	20,401						
Labor Income	\$445 Million	\$689 Million						

¹Total Impact includes multiplier effects estimated using an economic impact model (IMPLAN) of the Maine Economy.



- Every \$1.00 of revenue in the cleantech sector supports a total of \$1.66 in statewide economic activity.
- Economic activity associated with each person directly employed in the clean technology sector supports a total of 1.67 Maine jobs.
- The clean technology sector grew 31% from 2003 to 2010, adding 2,914 direct jobs. During the same period, overall employment in Maine grew by less than 1%.
- The average salary of clean technology occupations in Maine is \$48,769, 24% higher than the 2012 per capita income.



MAINE
EXPERIENCED 31%
GROWTH IN CLEAN
TECHNOLOGY
EMPLOYMENT
FROM 2003 TO
2010.

What is Clean Technology?

Clean Technology encompasses the production of a diverse range of value-added products, services, and processes with an environmental purpose or benefit.



Maine's cleantech product manufacturers, suppliers, researchers, and service providers have gained a worldwide reputation for excellence - expertise that is exportable around the world.

Photos: *TideGen*® launch in Eastport, courtesy of Ocean Renewable Power Company (ORPC). Wind turbine construction courtesy of First Wind.



This brochure contains highlights of a report entitled *The Clean Technology*Sector in Maine 2013. The report was prepared by Innovation Policyworks and the University of Maine School of Economics under Cluster Initiative Program (CIP) Award #144 to the Environmental & Energy Technology Council of Maine



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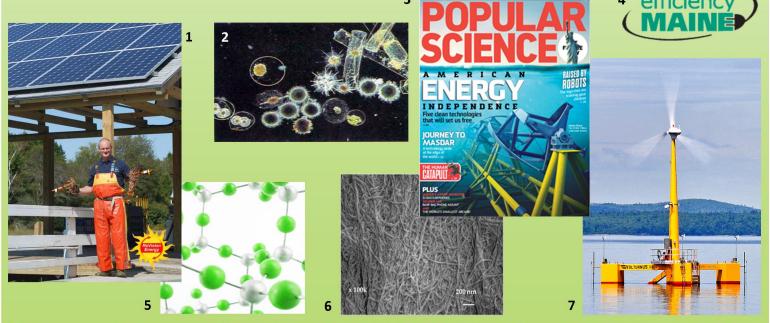
Clean Technology: It's here in Maine!

Renewable Energy	Biofuels	Bion	nass	Geo- thermal		lydro- netics So		lar Wind	
Energy Efficiency	Energy Efficiency L		ighting Smart Building			s	Smart Grid		
Transportation & Alternative Fuels	Batteries			Mate		Vehicles			
Advanced Materials (biobased)	Bio-based Plastics			Green Chemistry			Nano-materials		
Environmental Services	Environmenta Protection		onment nediatio			Recycling/ Reuse		Waste Management/ Treatment	

A sector with strong and growing employment, a robust supply chain, engaged research and development assets, and significant nonprofit and professional services component is considered a major driver of a regional economy. Clean technology appears to fit all of these criteria, making it the most fully-integrated technology sector in Maine and one of the most important sectors overall.

- Almost half of Maine's clean technology sector companies have grown more than 10 % in the last year and 60 % plan to expand and/or purchase new equipment in the next 3 years.
- Half of the fastest growing clean technology occupations require a Bachelor's degree in a science or engineering field.
- A strong professional support services and nonprofit community enables the sector.

- Maine has a robust policy climate with regard to environmental and energy issues. In the last decade, this support was expanded to R&D in new technologies, especially in renewable energy.
- The Maine Technology Institute has invested \$2.4 million in clean technology projects since 2007.
- Maine has significant research assets in clean technology:
 - Advanced Structures and Composites Center (UMaine)
 - Forest Bioproducts Research Institute (UMaine)
 - Cellulose NanoFiber Pilot Plant (UMaine)
 - Climate Change Institute (UMaine)
 - Bigelow Laboratory for Ocean Sciences



1. Solar installation at Pott's Harbor Lobster Company, Harpswell, courtesy ReVision Energy. 2. Microplankton, courtesy Bigelow Labs. 3. ORPC TideGen® tidal power technology on cover of Popular Science (June 2013). 4. Efficiency Maine Logo. 5. Nanocellulose, courtesy University of Maine. 6. Nonwoven biobased fabric, courtesy Biovation. 7. University of Maine's VolturnUS offshore wind turbine.