

Definition of Clean Tech

Presentation to E2Tech Forum

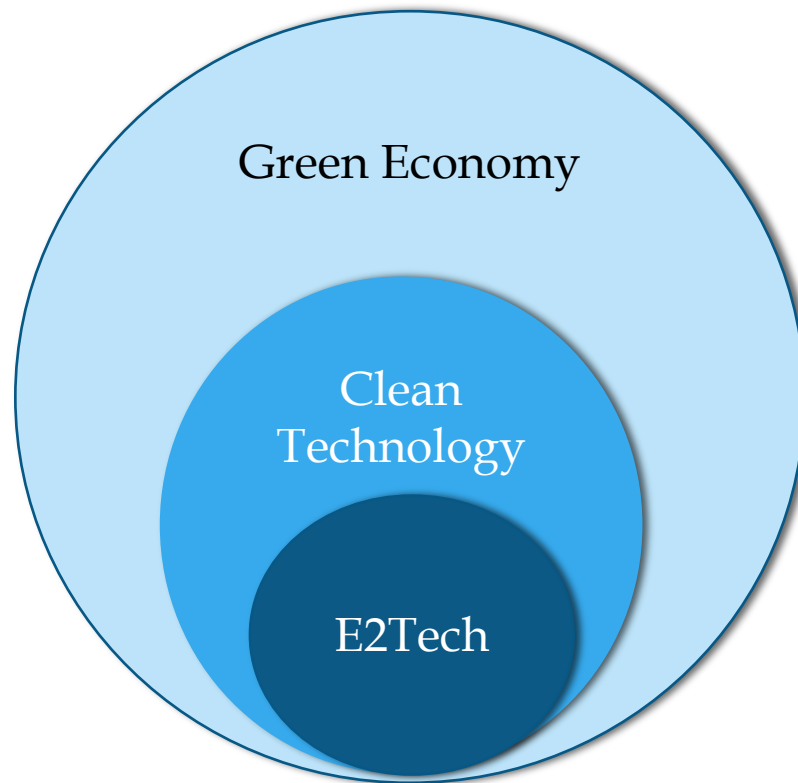
March 13, 2013

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“Clean Tech is green,
but not all green is Clean Tech.”



Our definition:

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

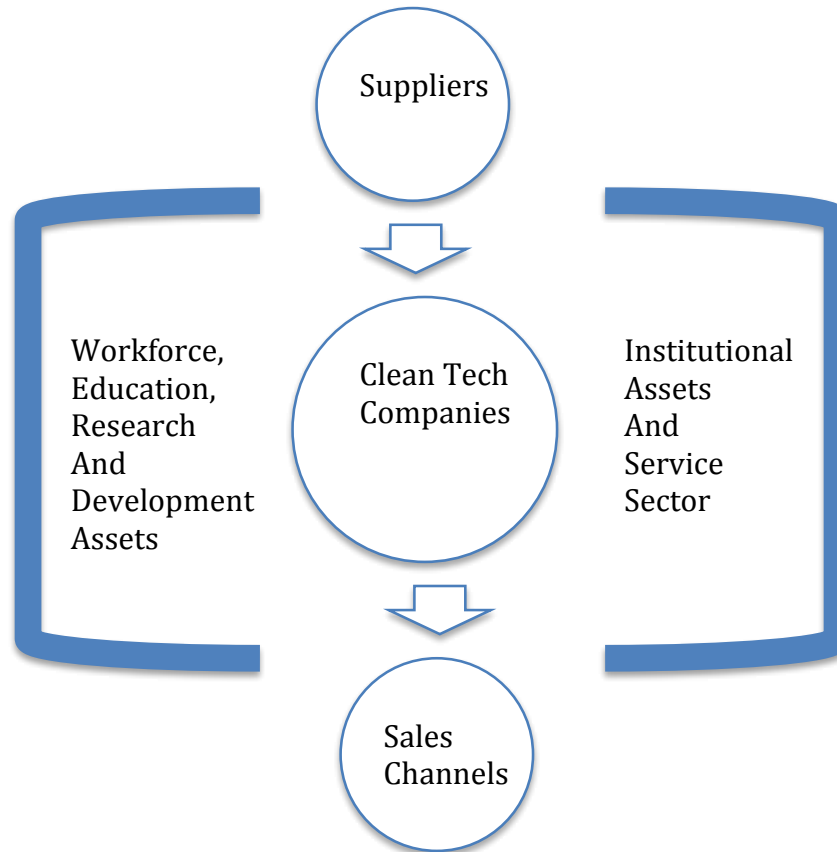


Technologies taxonomy:

Renewable energy	Biofuels	Biomass	Geo-thermal	Hydro-kinetics	Solar	Wind
Energy efficiency	Energy Efficiency	Lighting	Smart Buildings	Smart Grid		
Transportation and alternative fuels	Batteries	Materials	Vehicles			
Advanced materials (biobased)	Bio-based Plastics	Green Chemistry	Nano-materials			
Environmental services	Environmental Protection, Pollution Prevention	Environmental Remediation	Recycling and waste management, treatment			



How definition links to sector:



Describing the Clean Technology Sector in Maine:

Preliminary Results from Sector Survey

Presentation to E2Tech Forum

February 28, 2012

Caroline L. Noblet

University of Maine

You are important!

****Get Involved****

www.tinyurl.com/MaineCleanTech

Who are we? Maine's Clean Tech Sector: Some Basics

Old or New?

48% of respondents: established since 2000

70% of respondents: established since 1990

15% of respondents: established before 1980

Ownership and Structure?

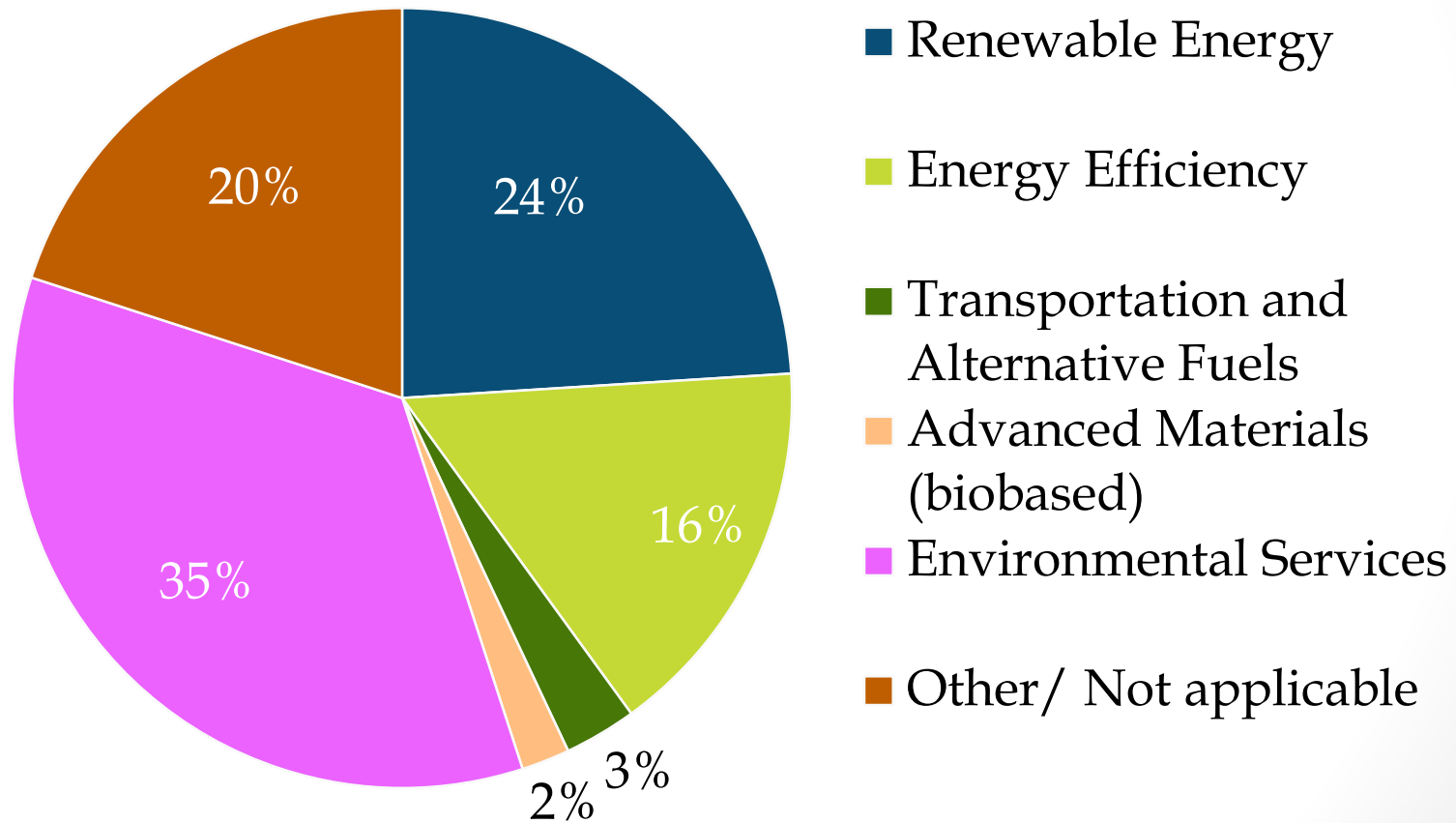
48% private corporation

73% single establishment firm

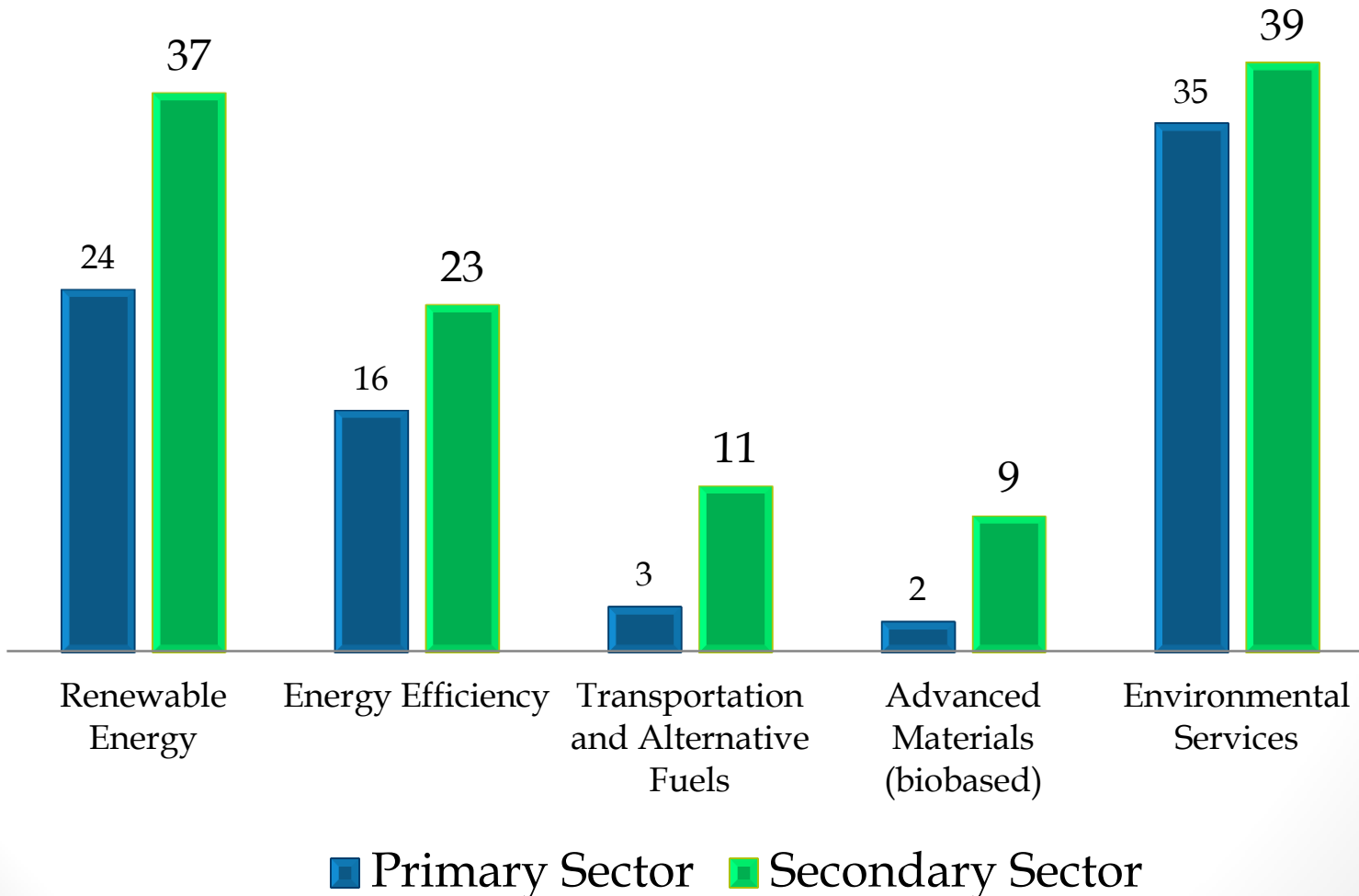
Small or Large?

63% employ 5 or fewer full time employees

What do we do? Maine's Strengths: Respondent Primary Areas



What do we do? Maine's Strengths: Respondent Secondary* Areas



What are we hearing? Business climate issues.....

Perception that nothing 'great' can happen in Maine

- lag in support for innovation
- lack of Angel Investors/Funding
- Inconsistent or limited support from State

Geography & Isolation – cost of transportation & travel; distance to market

What are we hearing..... needs for the future growth of the industry

Market and advocate with a strong, consistent and collaborative voice

- Market as a cluster (when possible)
- Advocate for reaffirming existing funding commitments (ex: R&D Bond funding; FAME Seed Tax Credit; Efficiency Maine)
- Advocate for policy & travel changes

What are we hearing..... needs for the future growth of the industry

Create Own Opportunities; Be Proactive

- Venture Capital 'Marketplace': incubate and fund new ideas; target post -seed funding entities

Improved connections/collaborations

- Attract/share workers
- R&D with other firms, University, Community Colleges

Where do we go from here?

(1) We'd like to hear from you!

www.tinyurl.com/Mainecleantech

(2) What collaborations and support is the Maine Clean Tech sector involved in or receiving?

(3) Who (what skill sets & educational level) is being employed? Where are these workers coming from?

(4) Contribution to the Maine economy

(5) What does the future look like? What are Clean Tech firms' next steps?

Environmental and Energy Technology Sector: Updated Economic Impact and Recent Growth

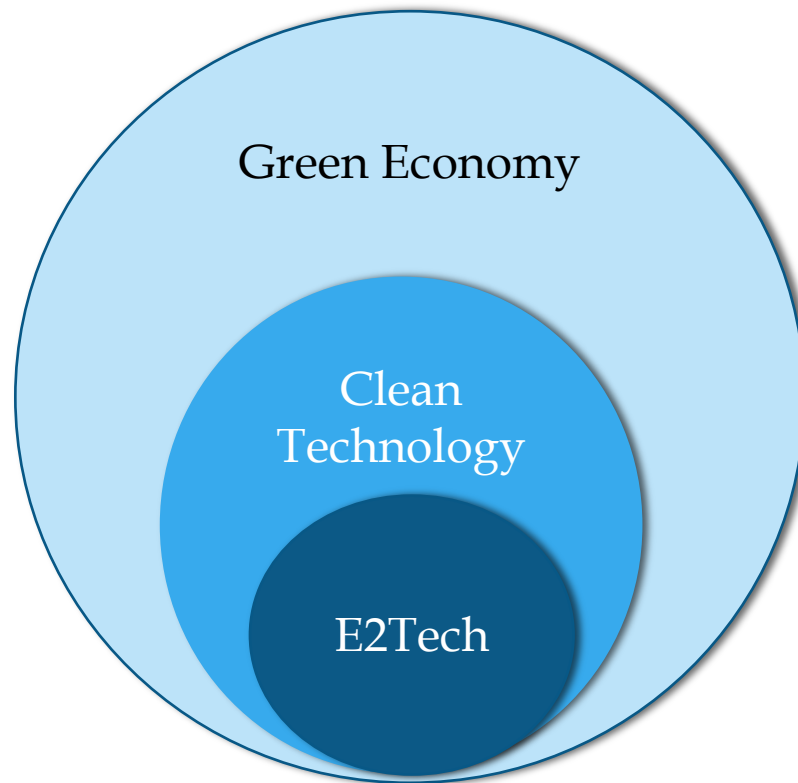
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Todd Gabe

University of Maine

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2007 E2Tech study:

- ⇒ Sector supported 9,650 jobs and \$330.9 million in labor income
- ⇒ 14th nationally in % of state's businesses in environmental and energy technology sector
- ⇒ 6th largest employer (and earnings provider) among 11 "comparison" industries

Recent growth: employment

- ⇒ 3.2% increase in environmental and energy technology sector, 2004 to 2010
- ⇒ 2.7% decline in overall Maine employment

Recent growth: earnings

- ⇒ 27.6% increase in environmental and energy technology sector, 2004 to 2010
- ⇒ 11.9% increase in overall Maine payroll

Updated economic impact

	Direct	Multiplier Effects	Total
Output	\$847.5 mil	\$573.9 mil	\$1.4 billion
Employment	5,437	5,092	10,529
Labor Income	\$284.3 mil	\$168.3 mil	\$452.6 mil

Sector as a % of Maine businesses:

- ⇒ 1.21% in 2007 study (14th nationally)
- ⇒ 1.23% in current study (24th nationally)
- ⇒ Sector grew in importance to the overall economy more in other states than in Maine

Sector compared to other industries in Maine: employment

⇒ Sector ranks 4th behind lodging, paper manufacturing, and food manufacturing (sector moved ahead of wood product manufacturing and forestry/logging)

Sector compared to other industries in Maine: earnings

⇒ Sector ranks 4th behind paper manufacturing, fabricated metal product manufacturing, and lodging (sector moved ahead of wood product manufacturing and food manufacturing)

Summary:

- ⇒ Growth of environmental and energy technology sector outpaced Maine economy
- ⇒ Sector's importance to the overall economy grew faster in other states than in Maine
- ⇒ Sector improved its standing relative to other key Maine industries