Financing safer chemistry – needs and opportunities

Joel A. Tickner, ScD
Lowell Center for Sustainable Production, UMass Lowell
joel_tickner@uml.edu
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What is the need?

• Funding/Financing
• Technical support
• Business support (legal/IP)
• Partnerships/connections
Funding for what?

• Funding (idea development/prototyping)
  – Basic R&D/collaborative R&D
  – Bench scale/proof of concept

• Funding/financing/incentives (pilot scale and manufacturing)
  – Pilot scale
  – Performance (or toxicity) testing/evaluation
  – Reformulation/revisions of manufacturing process to accommodate alternative
  – New manufacturing equipment/processing capacity
  – Establishing new manufacturing facilities

  – Most VC is early stage with clear benefits
Technical support

- Applied research
- Joint testing
- Toxicological analysis
- Demonstration projects
- Engineering support
- Capacity building and education
- Supply chain collaborations
Business support

• IP protection
• Corporation formation
• Joint ventures, licensing
• Partnering/networking/engagement
Models

- Innovation support centers/funds (Finland)
- European Enterprise Network
- Danish Environmental Technology Development and Demonstration Program
- Green Centre Canada
- MA Toxics Use Reduction Institute
- US Manufacture USA
- Small business loan mechanisms (across countries/regions)
Lessons

• Link research agenda to sustainable chemistry agenda – funding is policy-driven and should be guided
• Understand what are the most important needs for companies at different stages/sizes – tax incentives, low cost financing, technical support etc.
• Link from basic research to specific applications where there is business need (academic, government, industry collaborations)
• Increasing tendency towards partnerships (sectoral/value chain)
• Market connections more important for start ups than actual funding (tech scouting)
• For larger companies, business units are like start ups and need access to capital funds for process change/scale