



Financing safer chemistry – needs and opportunities

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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