

The Changing Nature of Chemicals Management

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Internationally – Similar Problems

1. **Lack of information on chemicals in commerce**
2. **Unequal treatment of new/existing chemicals**
3. **Slow, inefficient chemical by chemical risk assessment/management processes**
4. **Lack of integrated, modernized, and forward-looking approach to chemicals management.**
5. **Lack of incentives to stimulate development of safer substitutes**
6. **Increasing concern about chemicals**
7. **Lack of public confidence in government and industry**



Chemicals Management History

- **Stage 1 Disposal and Dilution**
- **Stage 2 Waste Treatment and Pollution Control**
- **Stage 3 Toxics Policy**
 - chemical by chemical regulation (US TSCA, EU Dangerous Chemicals)
- **Stage 4 Chemicals Policy**
 - chemical systems, product design



New demands and innovations internationally

- **REACH**
- **WEEE and RoHS**
- **GHS**
- **SAICM**
- **Rotterdam and Stockholm Conventions**
- **New demands from Asia**



DRIVERS: RISING GLOBAL STANDARDS

- The drive to meet rising global standards of one kind or another is affecting just about every multinational FORTUNE 500 company. Spurred by regulation in Europe and the prospect of sales to China, [General Electric](#) is investing \$1.5 billion over the next five years in research into energy-efficient and environmentally friendly products like wind turbines, clean coal technology, and appliances that save water or electricity. [Intel](#), [Xerox](#), [Motorola](#), and [Dell](#) are revamping their supply chains to get lead out of microprocessors, copiers, cellphones, and computers. And [Nike](#) and [Gap](#) dispatch inspectors who monitor hundreds of their suppliers in the developing world, at considerable expense.
- What we're seeing here are local standards that have worldwide impact—for better or worse. It can be frustrating (not to mention costly) to comply with tough European Union regs, but it's bad business for multinationals to make things that won't sell across the global economy—so companies tend to cleave to the highest regulatory standards and consumer expectations no matter where they arise. Even a big state like California can have influence far beyond its borders, partly because of Washington's laissez-faire attitude toward regulation.
- Fortune June 17, 2005
<http://www.fortune.com/fortune/articles/0,15114,1071732,00.html>

Regulatory demands in the US

- **State discussions on chemicals**
 - Washington – PBTs
 - California
 - Oregon
 - Massachusetts
 - Maine
- **Local initiatives – San Francisco, Seattle, Portland, Boston**



Market Drivers

- **Large retailers/manufacturers placing material demands on suppliers**
 - **Manufacturers such as H&M, Nike, Interface, Herman Miller**
 - **Retailers and service providers such as WalMart, Kaiser Permanente**
- **Government purchasing changing rapidly.**



Innovative government and professional initiatives

- **Green chemistry**
- **Green engineering**
- **Design for Environment**
- **Chemical substitution**

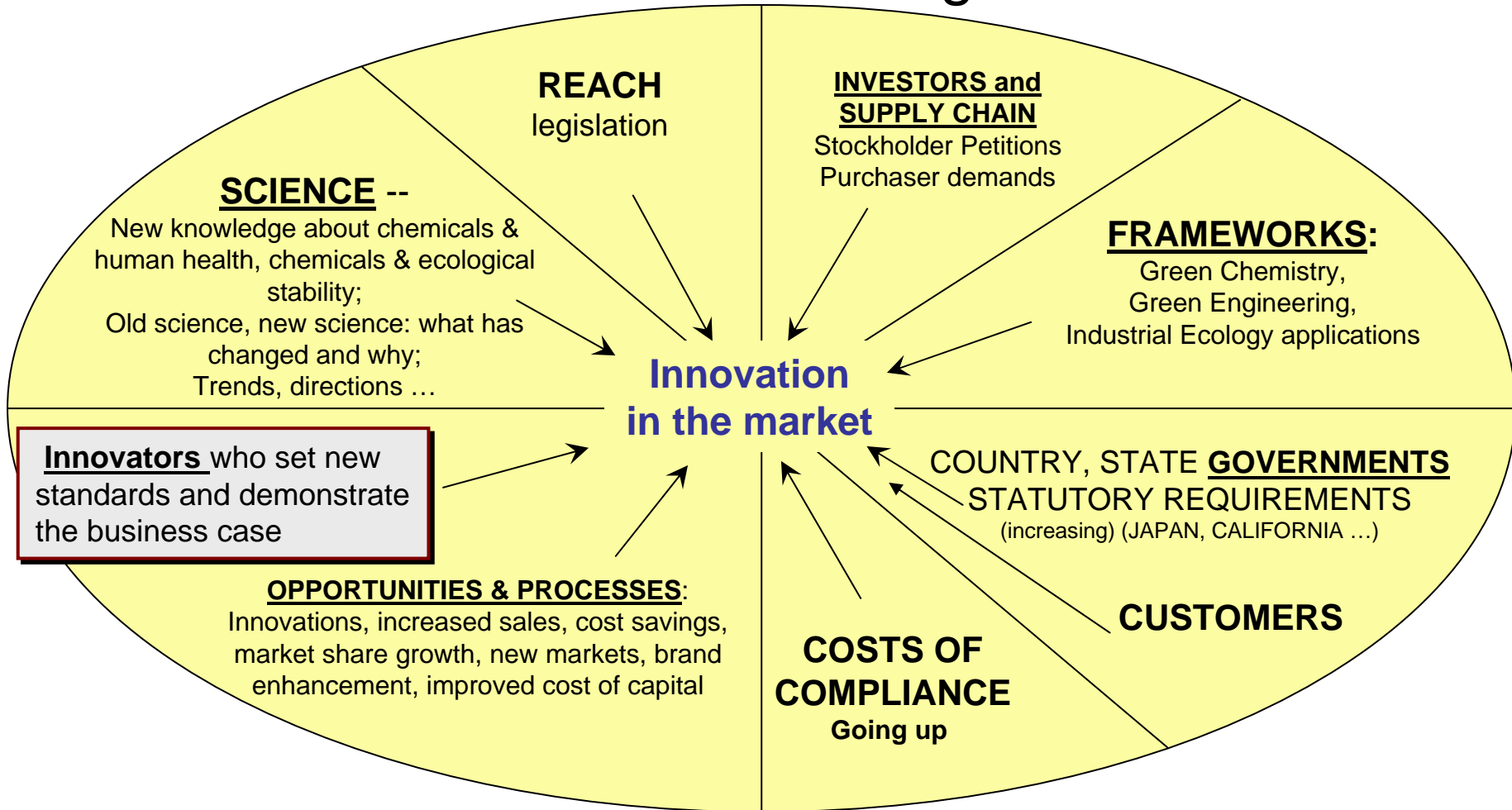


Framing the Problem

- **Way problem is framed helps to define the types of solutions one seeks**
- **A broader, more inclusive framing can help lead to deeper, longer-lasting solutions**
- **Framing as an opportunity provides new ways to look at problems and solutions**



Innovation in Chemicals/Materials Use: Drivers Of Change



The Future

- **Change is occurring and U.S. businesses have to compete in an increasingly environmentally/ health conscious marketplace**
- **There is a need for dialogue on solutions and innovations, including new tools and approaches**
- **Identifying options and opportunities to move forward (including barriers and needs)**

