



# Regulatory Decisions Under Uncertainty

Leonard Robinson, Federal Liaison  
California Environmental Protection Agency -  
Department of Toxic Substances Control

# California Department of Toxic Substances Control



- Mission: Protect Public Health & the Environment
  - Identify “emerging” contaminants
  - Promote pollution prevention
  - Pursue “green” products
  - Regulate hazardous waste
  - Restore property and communities

# Environmental Problem



- We produce and consume products and create markets that have potential impacts on the environment, public health and the economy
  - Consume products which produce hazardous waste
  - Costs to economy are greater than initial value
  - Passing costs on to future generations
- How do we protect a future we do not know?

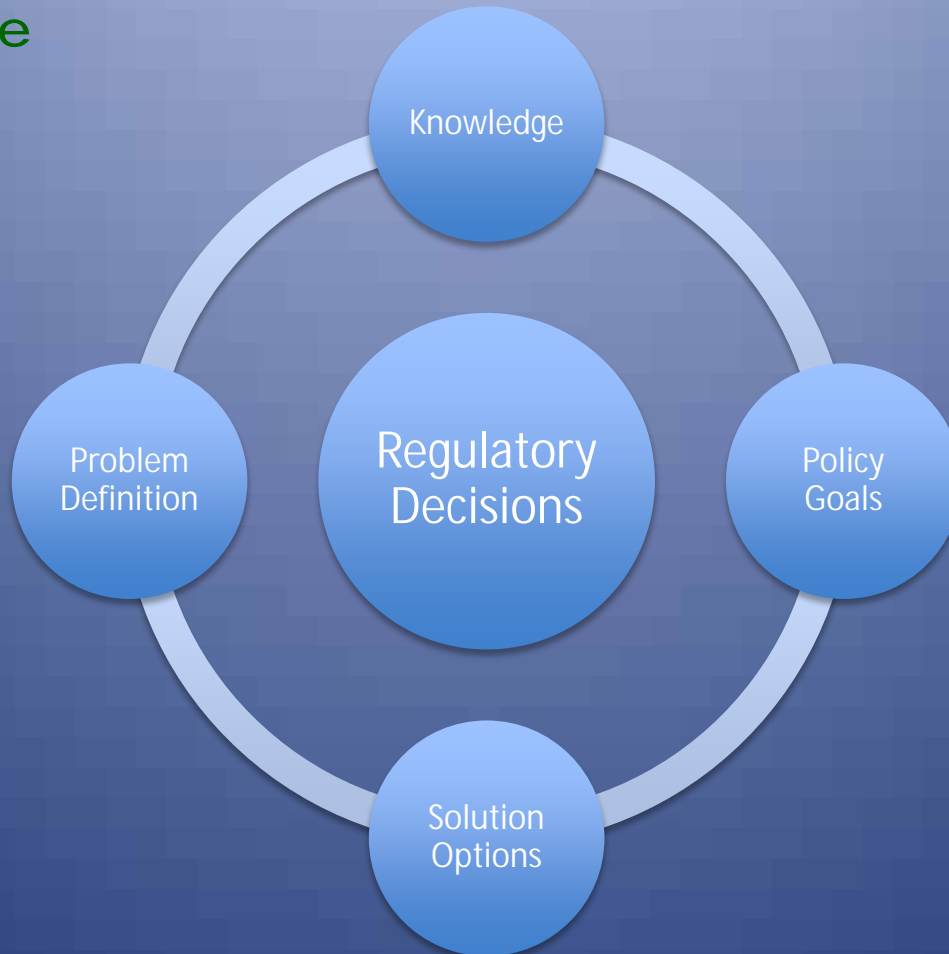
# Looking for Solutions

But nothing is perfect

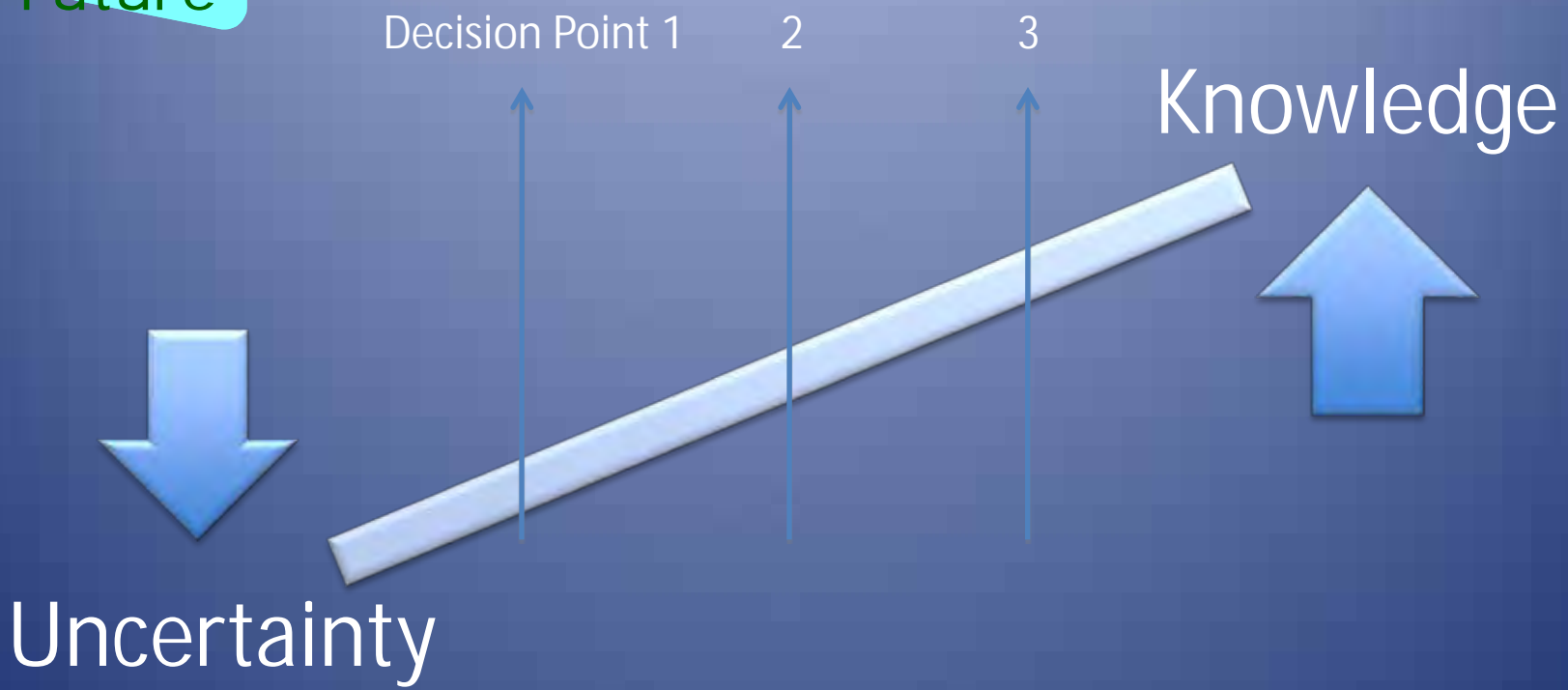


- Lack of knowledge and understanding
- Re-search
  - Confirm “old” knowledge through “re-search”
  - Gain “new” knowledge through “new search”
- False expectation: “Perfect” knowledge is the foundation of “perfect” decisions by the government

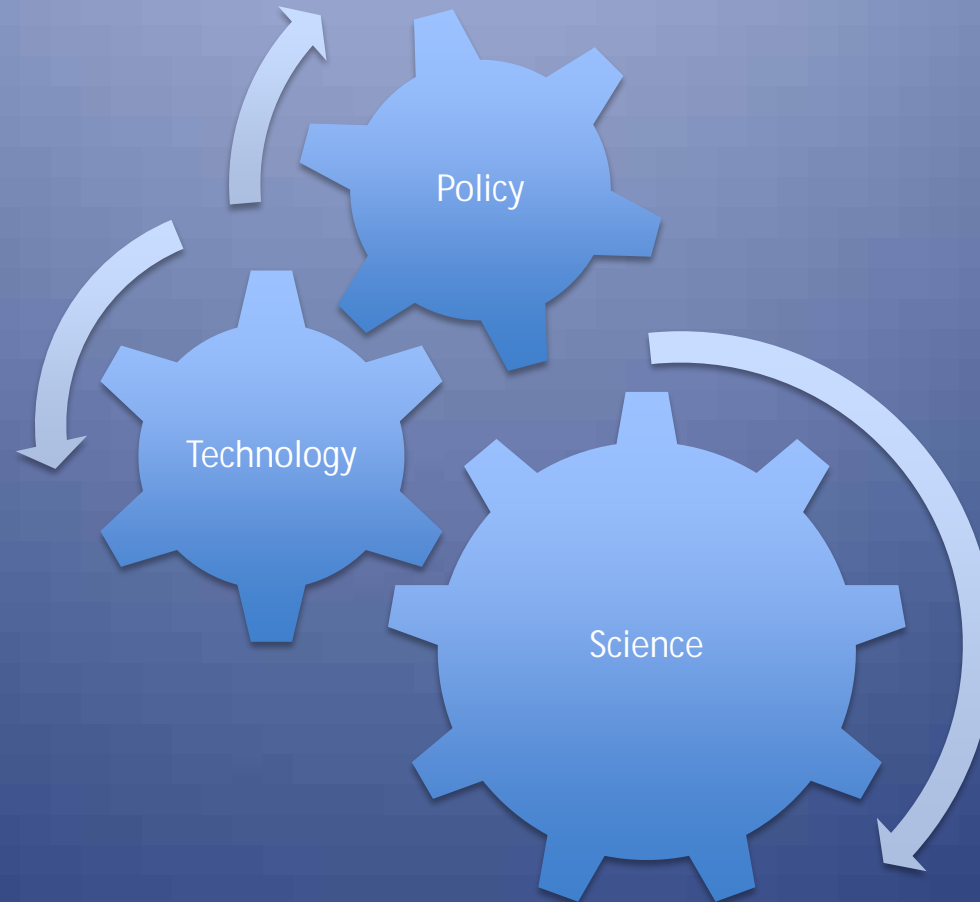
# Boundaries & Constraints to Regulatory Decisions



# Continuum of Uncertainty & Knowledge

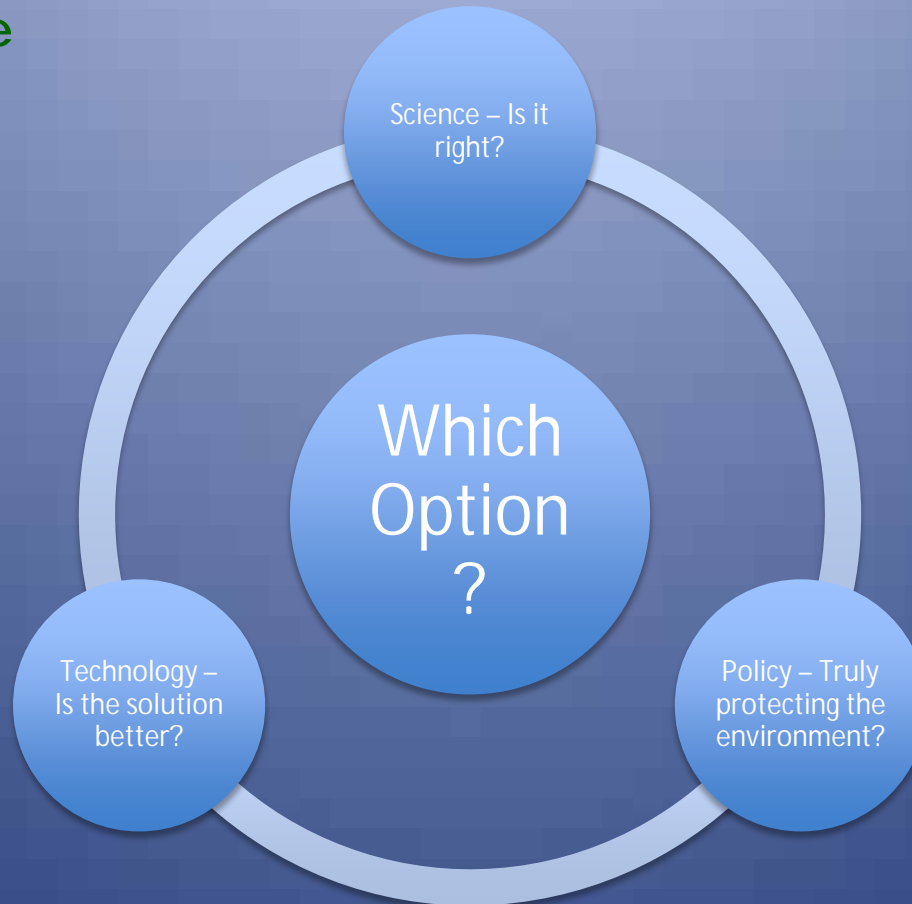


# Uncertainty in the Regulatory World



# Regulatory Solutions?

Re-design, Restrict, Remove ?



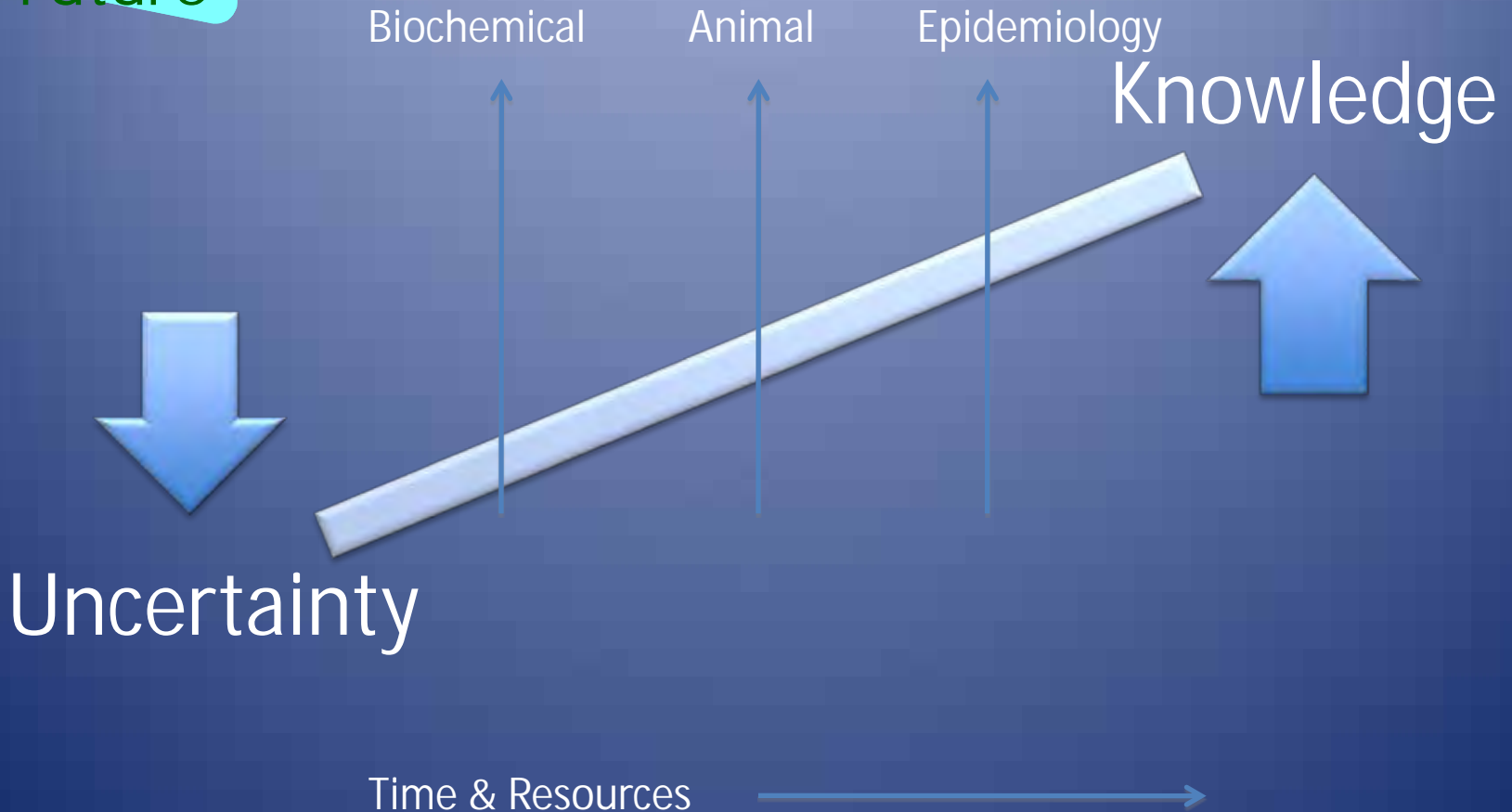


# Focus on Science Uncertainty



- More than 80,000 chemicals on TSCA Inventory
- More than 5,000 in general commerce
- Much smaller subset with health and environmental information

# Does it cause cancer?



# California Green Chemistry Initiative

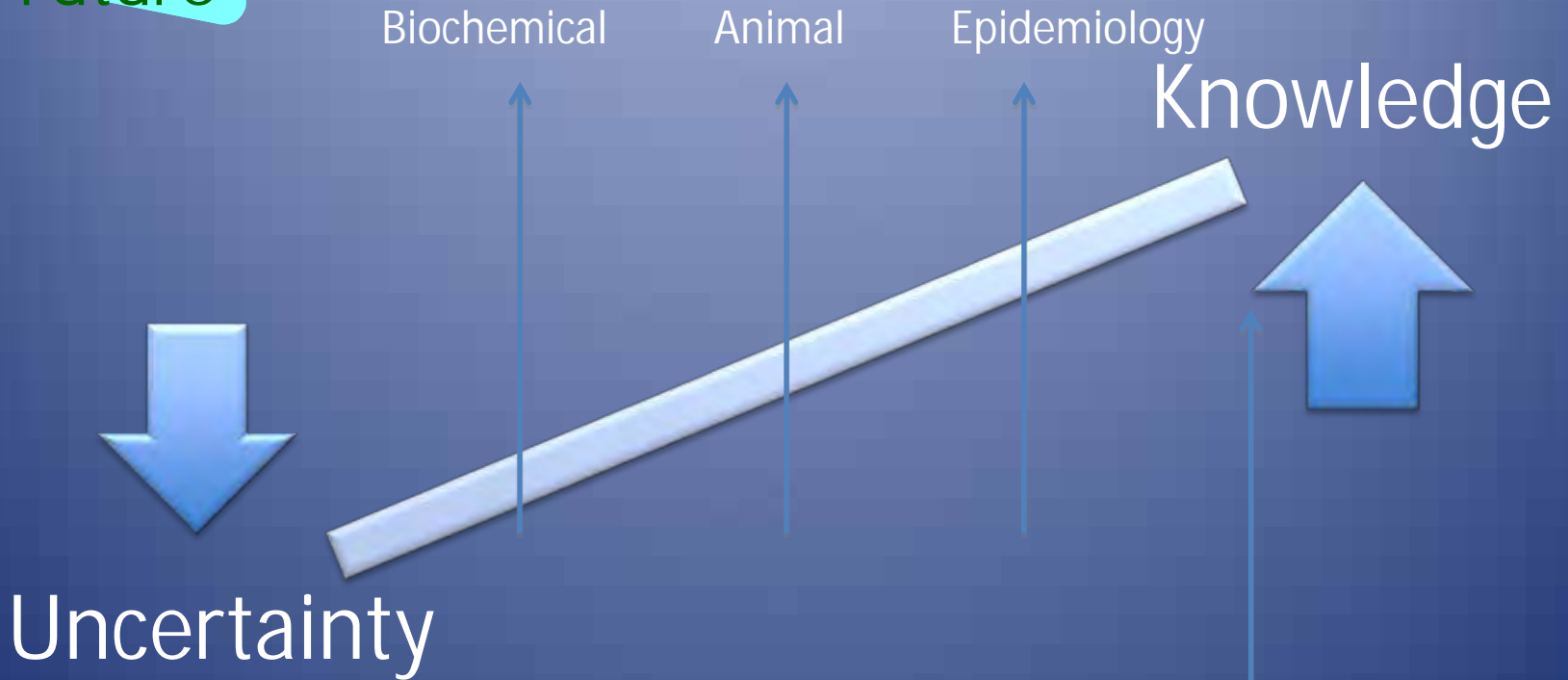


- Goal: California is a leader in innovation, use, and manufacture of safer, ever more environmentally benign chemicals and products.
- Producer Responsibility
- Create incentives that fill the marketplace with information about products

# GCI Options

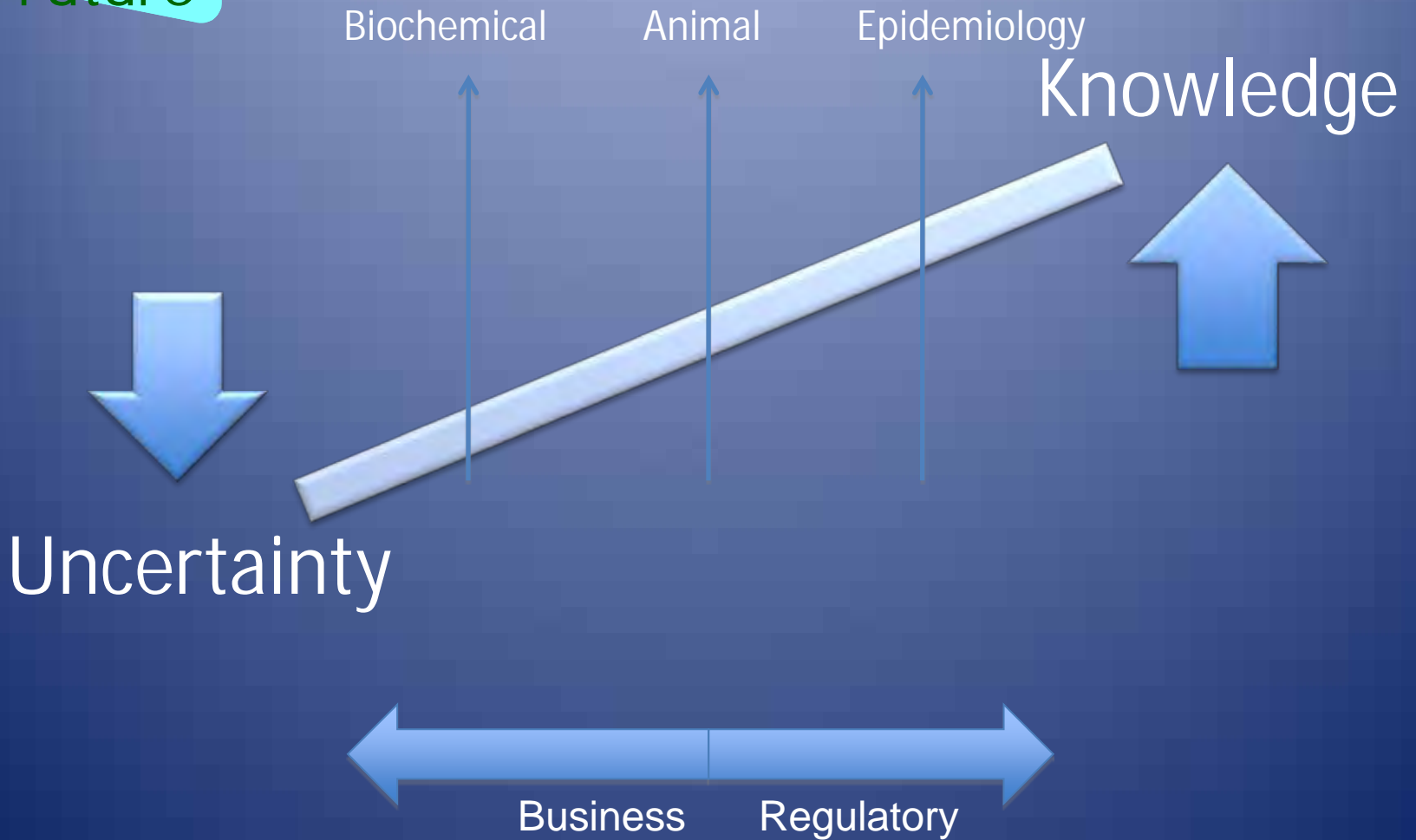


# Role of Pre-caution

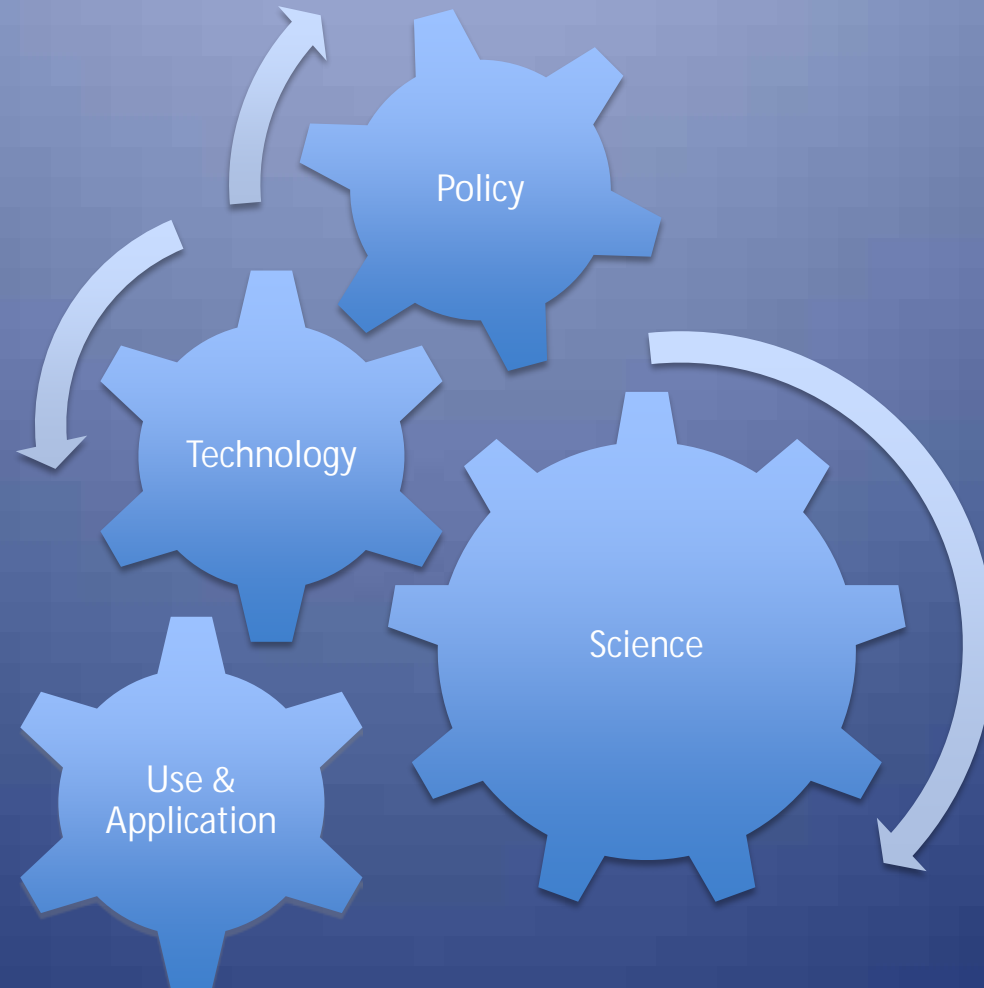


Cannot demand perfect knowledge for every product

# Role of Pre-caution



# Making a Decision



# Current GCI Tools



- AB 1879 – Accelerate Quest for Safer Alternatives
- SB 509 – On-line Toxics Clearing House
- AB 289 – Chemical Data Call-in



# Knowledge will Mitigate Uncertainty



- Incentive to markets
- Increase environmental and public health protection by creating market superiority through more thorough knowledge of product chemistries and impacts
- Persistent uncertainty will restrict markets and increase government intervention
- Reducing uncertainty will “free” markets
- Don't wait for us – ask your customers !