Making Science Work for Environmental Public Health Policy: Revisiting Sustainable Development Imperatives for Clean Air and Safe Energy

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Objectives

- Examine the impact of U.S. energy policy on environmental public health
- Articulate strategies to integrate sustainable development imperatives for clean air and safe energy
- Define an evidence-based policy framework to assure public health protection

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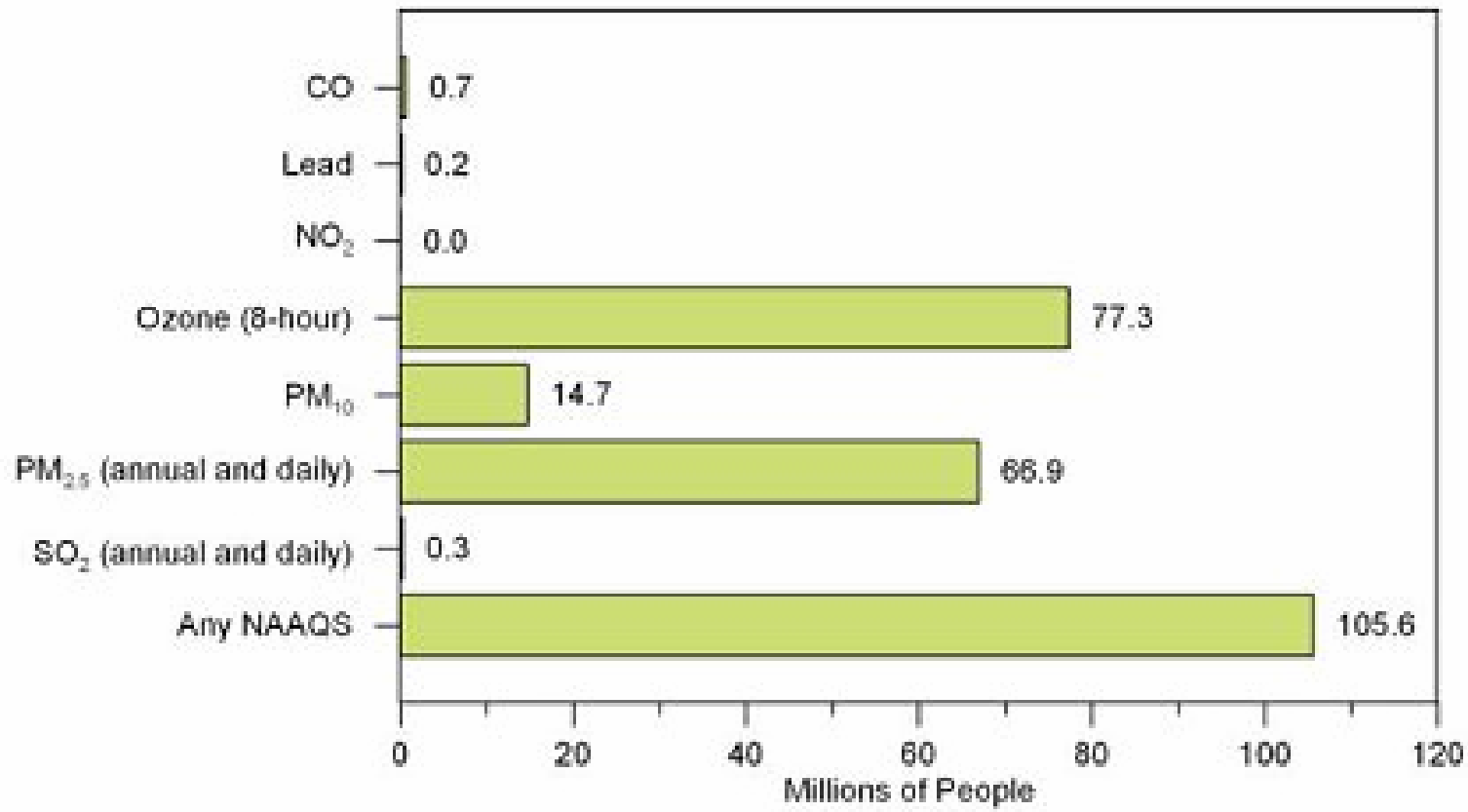
Number of People Living in Counties with Air Quality Concentrations Above the Level of the Primary NAAQS in 2006



EPA 2006

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States with climate action plans. *Source*: US Environmental Protection Agency 2007

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US energy policy: the road already traveled

- 1872 Mining Law
- Surface Mining Control and Reclamation Act of 1977
- Land Use Act of 1978
- 1949: demand for oil exceeds local supply
- 1973 OPEC oil crisis- energy conservation policy revisited
- Isolated policy efforts since then

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“ the raw data”

- Dominant energy source: coal and oil
- 5% of global population; 25% of energy consumption
- Largest GHG emitter
- Energy demand growth projection: 33% in 25 years

(Dernbach, 2007)

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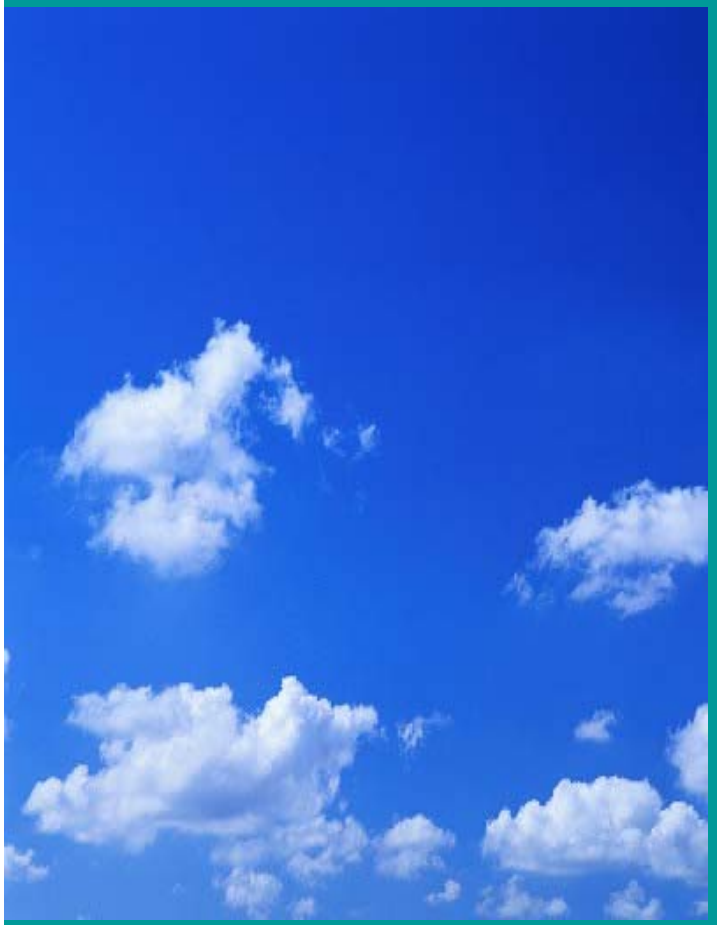
Energy policies impacting air quality



- Energy Policy and Conservation Act of 1975
- Pres. Carter's National Energy Policy and the 9178 National Energy Act
- Energy Policy Act of 1992
- Energy Policy Act of 2005

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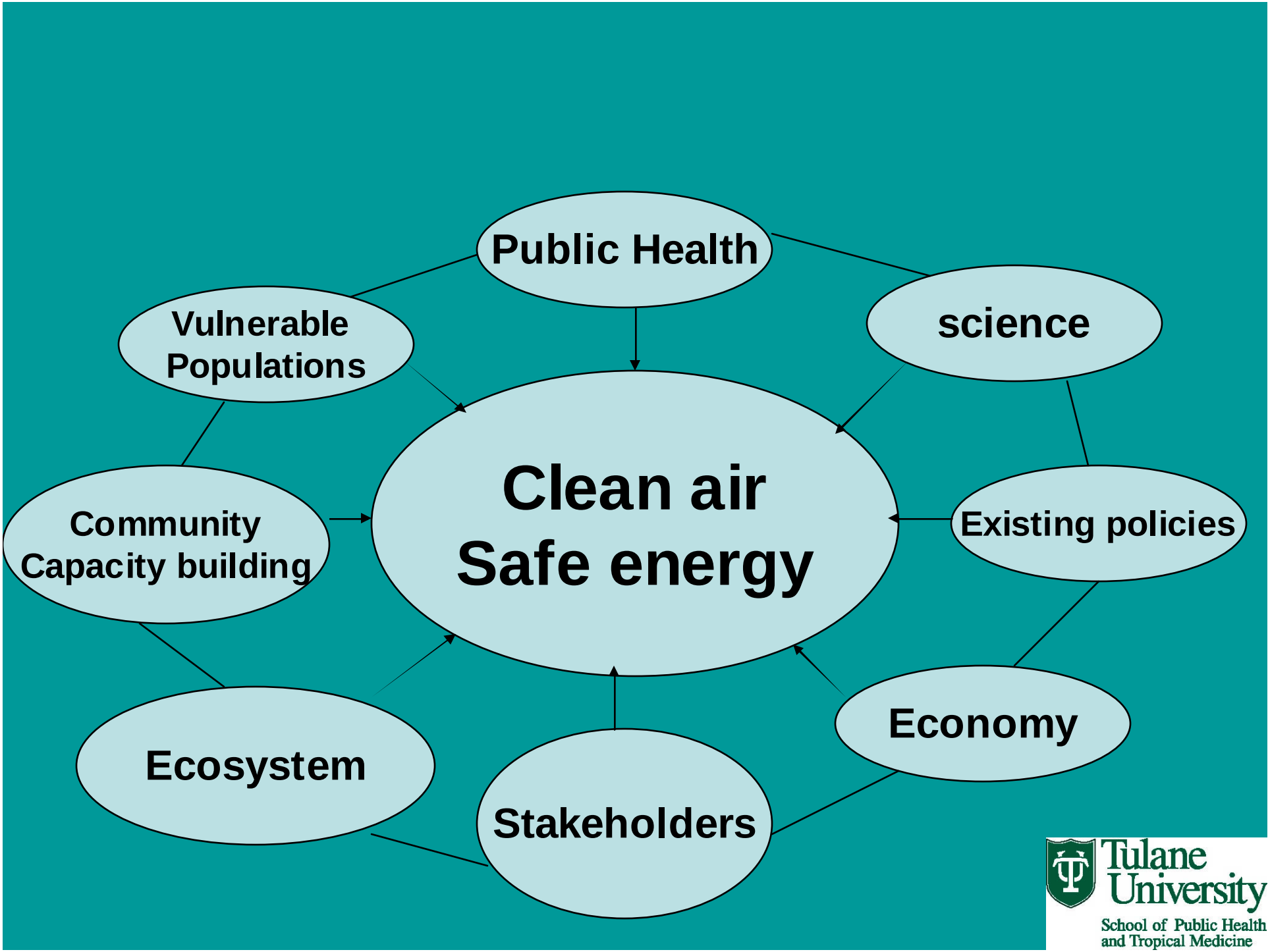

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Pilbarairon, Australia

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Tenets of sustainable development

- “the ultimate purpose of development is to provide increasing opportunities to all people for a better life and to safeguard the environment”. international Strategy document. UN 1970
- “sustainable utilization of species and ecosystems”. World conservation strategy Project. UN 1980

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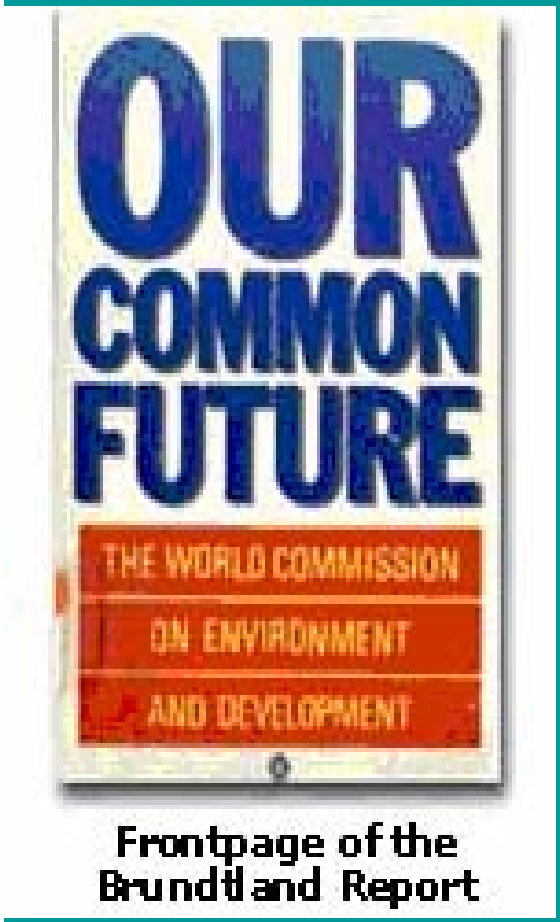
Tenets of sustainable development



Frontpage of the Brundtland Report

- Sustainable development is a solution to poverty, resource depletion, loss of biodiversity and environmental pollution
- Industrial development can alleviate poverty and in turn poverty-driven overexploitation of the environment
- “Meets the needs of the present without compromising the ability of future generations to meet their own needs”

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Post 1993 RIO conference

- Clean Air Act deemed already in line with the tenets of sustainable development

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1996 Presidential Council on Sustainable Development

- Economic prosperity, environmental quality, and social equity need to be pursued simultaneously
- Science-based national standards that protect human health and the environment are the foundation of any effective system of environmental protection
- Technology-based regulation can encourage and stifle innovation
- Pollution prevention is better than prevention control

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Science and Policy : not strange bedfellows…

- Waste-to Energy Facilities and Clean air- 1995 Performance Standard Guidelines
- 1997 Regulation of Ozone and PM standards
- US Supreme Court Greenhouse Gases Lawsuit Decision, 2007

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The policy sausage

- Contemporary science
- Precautionary principle
- Health of people AND their environment

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The Precautionary Principle: A Policy Framework for decision making

- Anticipatory action to prevent harm in the face of scientific uncertainty
- Alternatives– including no action
- Full cost on communities and the system
- Public participation in decision making
- Proponent of an action responsible to provide evidence

Seattle-King County dept of health

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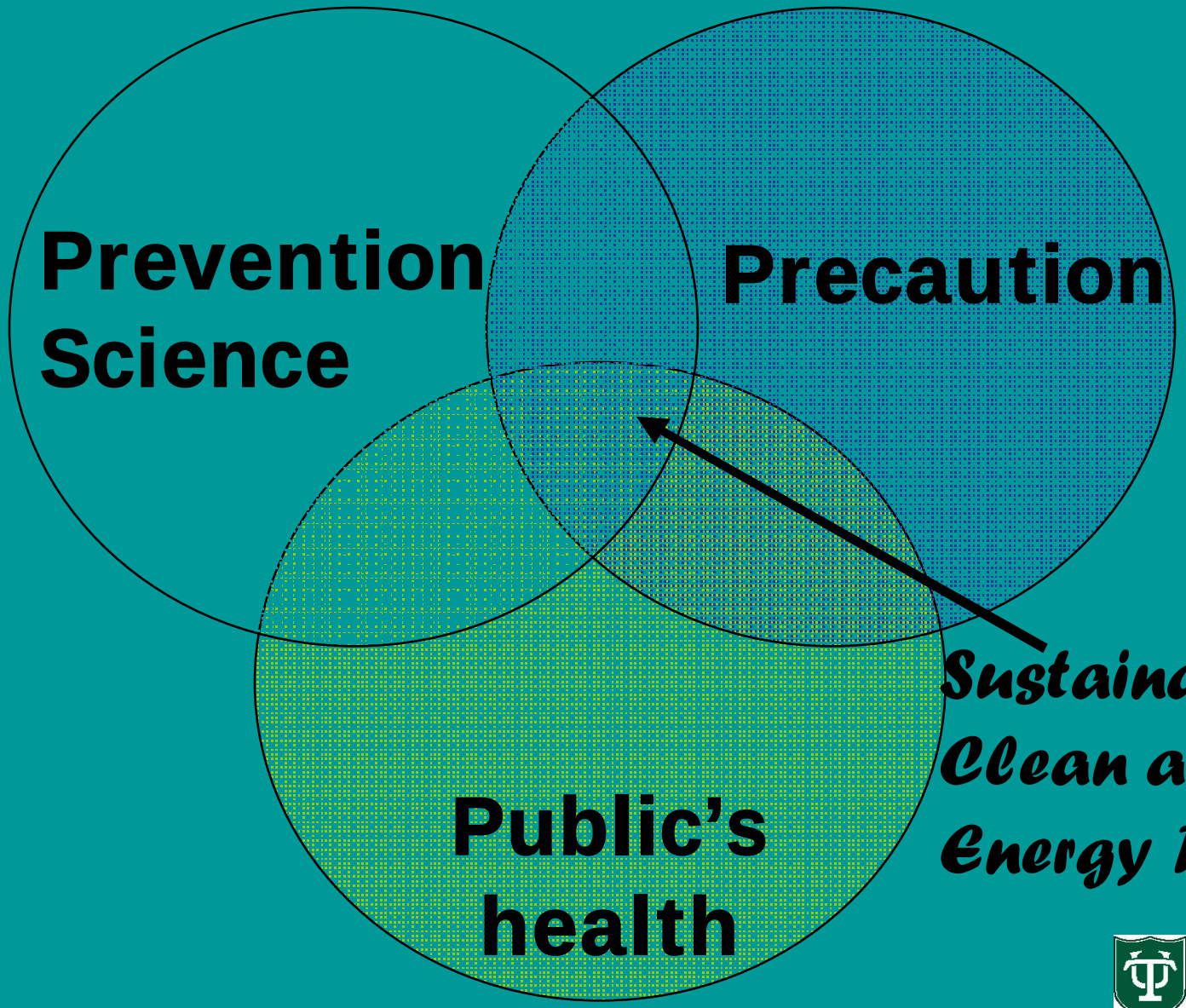

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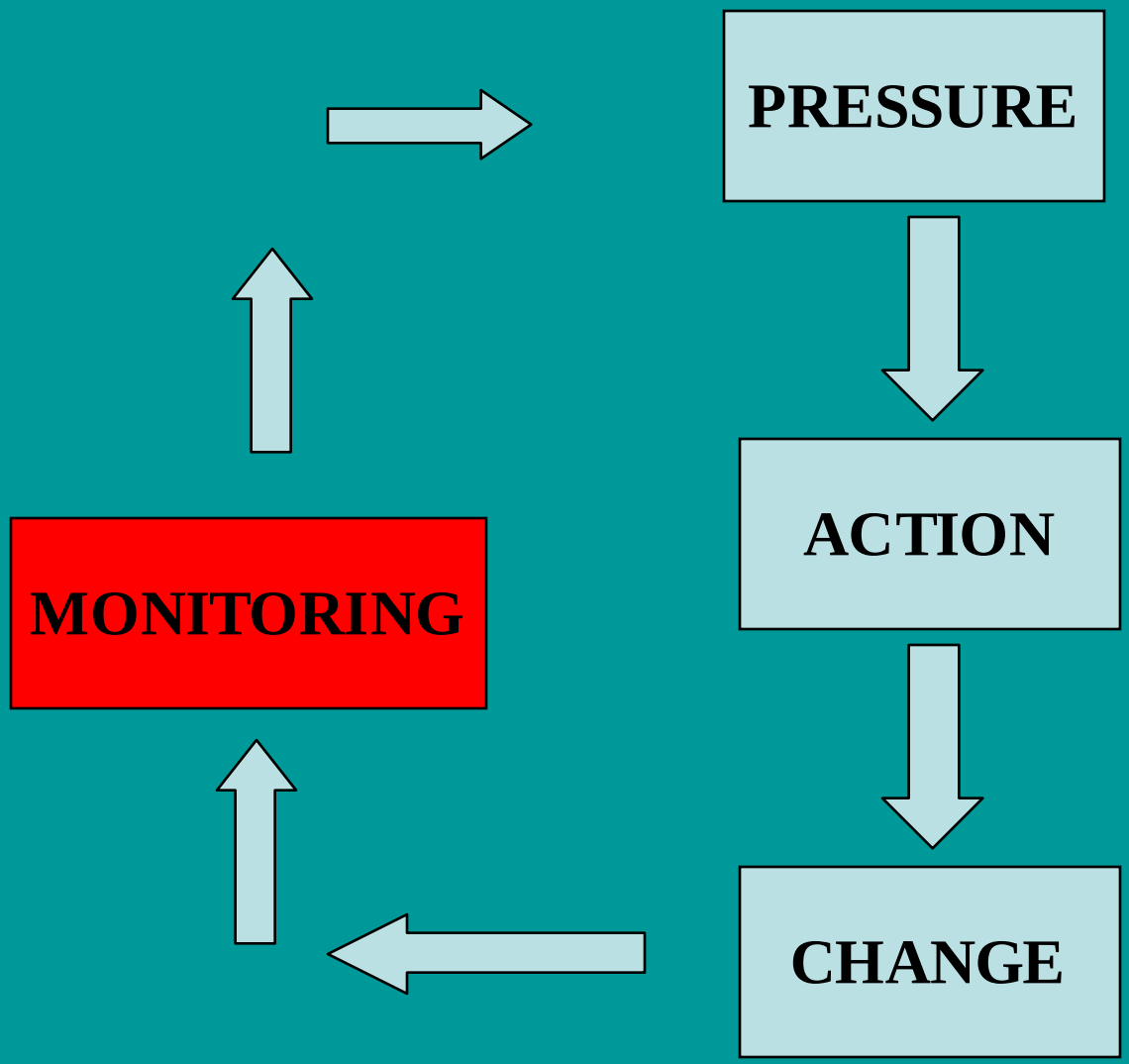
Monitoring for Sustainability



Johnson, BJ

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The enduring achievement is not climbing on the green bandwagon, but keeping it going…

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