

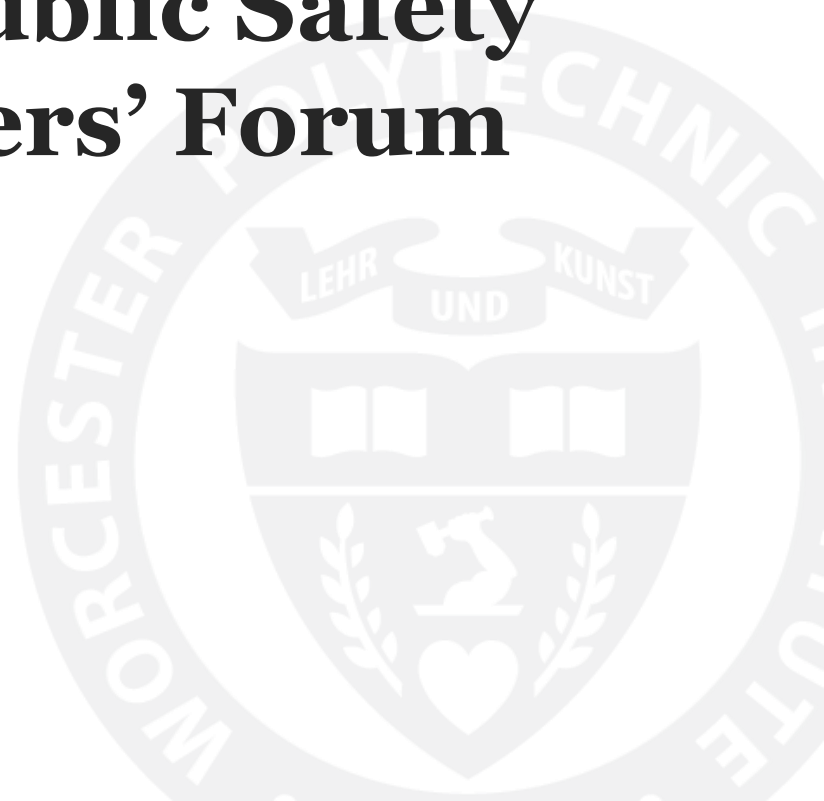


# WPI

## **Center for Global Public Safety Industry Stakeholders' Forum Perspectives on Energy**

Michael Ahern

March 27, 2019



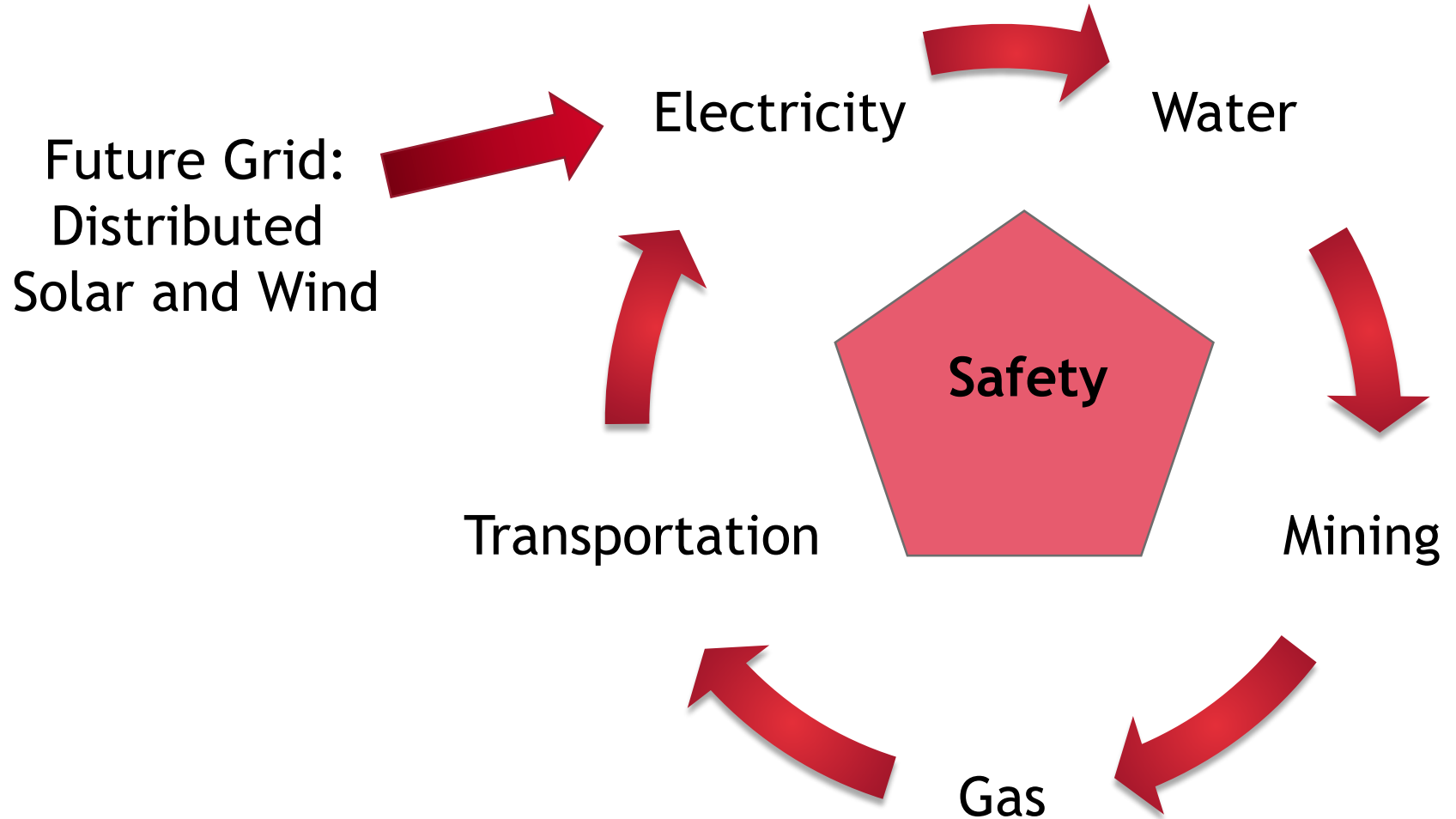
# Perspectives on Energy

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*Who would agree with me that  
Energy Systems Enable our Lives?*

# Interdependence of Energy Systems

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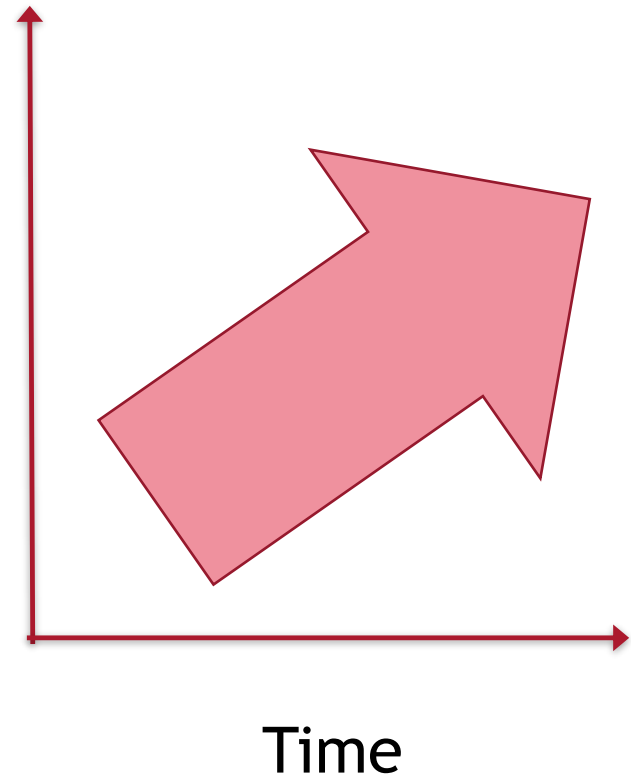


# Research on Energy Systems

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Since they are both essential and interdependent, research is being conducted on many fronts to improve their efficiency and reliability

Efficiency  
Or  
Reliability



# My Research: Power Grid Cybersecurity

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*One Defense Advanced Research Projects Agency (DARPA) Initiative is called RADICS - Rapid Attack Detection, Isolation and Characterization Systems*

RADICS includes:

1. Enhanced Situational Awareness systems;
2. Ability to create new, isolated networks to speed restoration; and
3. Forensic systems to detect and characterize the power grid malware.

\*Source: U.S. Department of Defense, Defense Advanced Projects Agency, Program Information , online at:  
<https://www.darpa.mil/program/rapid-attack-detection-isolation-and-characterization-systems>

# WPI Energy Research Group

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*Now, it's my pleasure to introduce . . .*

Mike Timko

Professor of Chemical Engineering

And

Chair, WPI Energy Research Group

**Thank you**

