



*American Institute of  
Aeronautics and Astronautics  
Dayton-Cincinnati Section*

**Lunch 'n' Learn**

**Jan 19th, 2024**

***“A Snapshot of the Global Energy Transformation”***

***Guest Speaker:***

***Dr. Douglas Dudis; Air Force Research Labs Energy Office***

**Abstract:** Energy undergirds all aspects of human civilization. Cheap energy is associated with prosperity while shortages indicate difficulties. Costs for sustainable living are dropping, and it is not difficult to visualize a world in which sustainable, distributed energy is widely available at costs, or even cheaper, than what has traditionally been available. Just as wood and coal played central roles in bringing about the industrial revolution, and the ready availability of petroleum enabled the transportation revolution of the 20th century, switching over to renewable primary energy supplies will herald civilization sized changes. The opportunities for economic growth and improvement of the lives of many in the world are tremendous. This talk will highlight progress being made and assess where we are in the transformation. Identifying what are the primary energy sources, and how might these be useful especially to the Air Force from mission capabilities will be addressed.

**Biography:** Douglas Dudis leads the Energy Office of the Air Force Research Laboratory and serves as Technical Director for the Materials and Manufacturing Directorate Energy Office. In these capacities, he serves to integrate, nurture, guide, coordinate and support the development of power-energy-thermal related technologies relevant to the Air Force, whether on aircraft, satellites, forward operating bases, ground support equipment or facilities. He serves on multiple national energy-focused panels and works with multiple agencies, industries and academia. He holds a B.S. (University of Dayton) and Ph.D. (Case Western Reserve University) in chemistry. He has authored over 113 referred publications and given over 271 invited and contributed presentations.

**Time:** 11:45 am

**Location:**

*China Garden Buffet  
112 Woodman Dr.  
Dayton, OH 45431*

**Lunch:**

*You will be able to  
purchase the buffet*

