



Our Journey to Net Zero

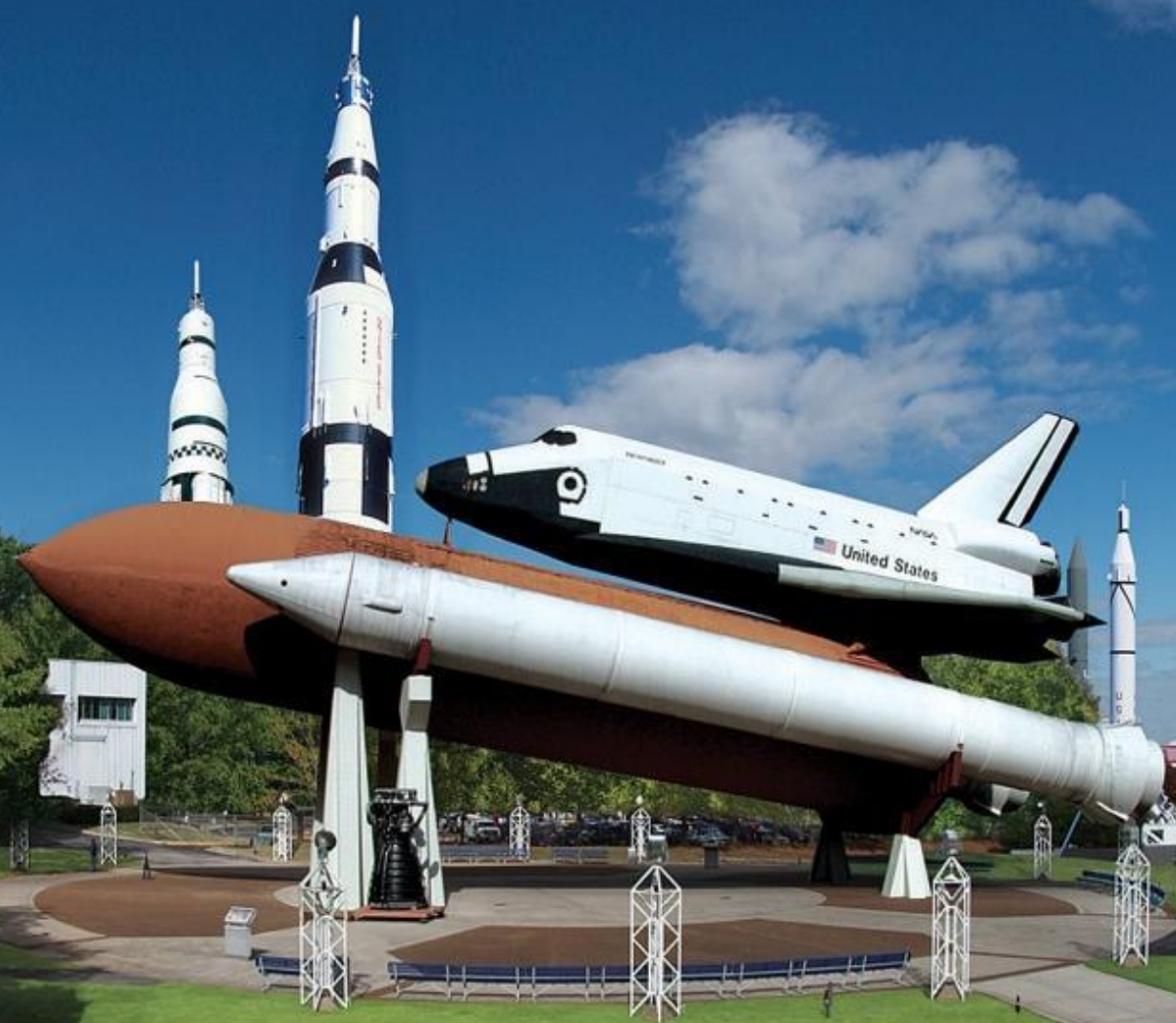
Dr. Deborah Barnhart
Chief Executive Officer and
Executive Director

Commissioned
by the
State of
Alabama
(1965)

Our Charter:



U.S. ARMY



**#1 Attraction in Alabama
~ 575,000 annual visitors**

Our Energy Challenge

- 432 acres using 80 for daily operations
- 22 structures totaling 491,452 square feet
- 10 major facilities using HVAC units
- 938 beds, 62 bathrooms, and 35 showers

Average use = 3 megawatts per day
costing \$1,300,000 per year



Federal Government: Net Zero by 2030



Executive Order 13514

- Starting in 2020, all new federal buildings must be capable of reaching Net Zero by 2030.
- At least 15 percent of current federal buildings must meet benchmarks towards Net-Zero by 2015.
- All federal buildings must be Net-Zero by 2030.

Department of Defense Operational Energy Strategy





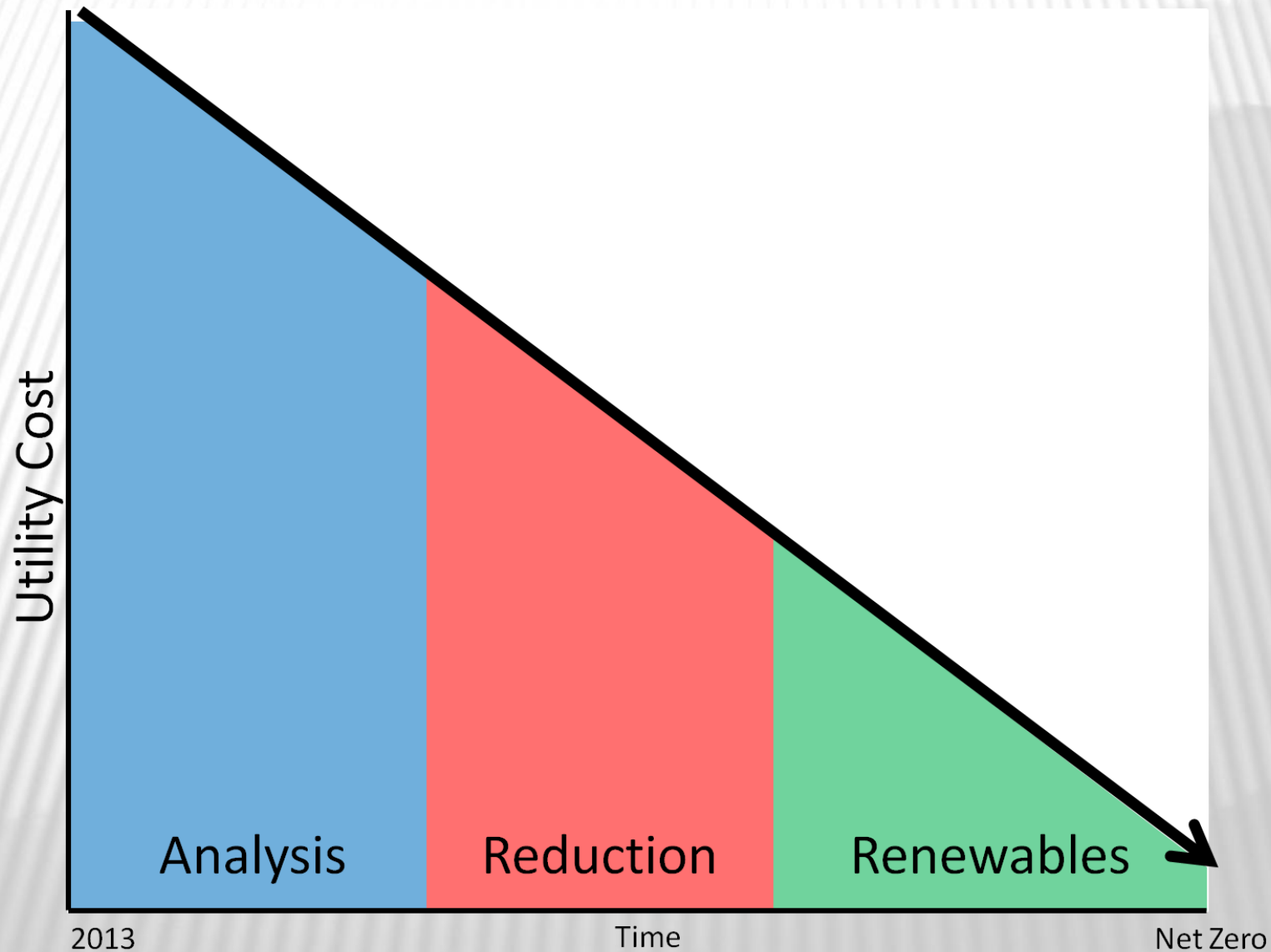




TOPGUN

AVIATION
CHALLENGE

Our Path to Net Zero





ECONOMIC DEVELOPMENT HIGHLIGHTS

CHAMBER OF COMMERCE OF HUNTSVILLE/MADISON COUNTY

Energy Huntsville Forms Partnership with U.S. Space & Rocket Center

The City of Huntsville, Energy Huntsville and the U.S. Space & Rocket Center have forged an alliance toward a new collaboration in energy technologies.

The Energy Huntsville Initiative - a coalition of 185 energy companies in Huntsville - will base its operations in the Space & Rocket Center. Mayor Tommy Battle, Energy Huntsville Chair Jay Newkirk and Space & Rocket Center CEO Dr. Deborah Barnhart signed a partnership agreement in the Davidson Center for Space Exploration's Saturn V Hall on April 3 to solidify the joint venture.

Energy Huntsville's volunteer base has grown substantially since its formation three years ago, and the organization has been looking for a base for operations.

"This new partnership will help all of us accomplish our energy goals and missions," said Newkirk. "The mayor's vision in creating Energy Huntsville was to provide jobs and economic development, and the U.S. Space & Rocket Center's long term objective is to realize net-zero energy efficiencies. Both will ultimately make Huntsville a Center of Excellence in energy technologies."

Energy Huntsville's new location helps create an environment in which it can intensify its work to offer solutions in the management and control of energy data and energy resilience and to have access to support personnel to fulfill its mission to provide jobs in the energy market sector.

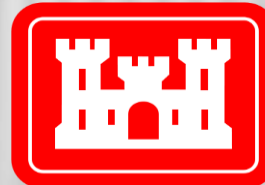
"Since its founding in 1970, the U.S. Space & Rocket Center has educated the public on energy technologies devel-



Jay Newkirk, Huntsville Mayor Tommy Battle, USSRC CEO Dr. Deborah Barnhart at announcement that the Energy Huntsville Initiative will base its operations at the U.S. Space & Rocket Center, where net-zero energy efficiency is the goal.

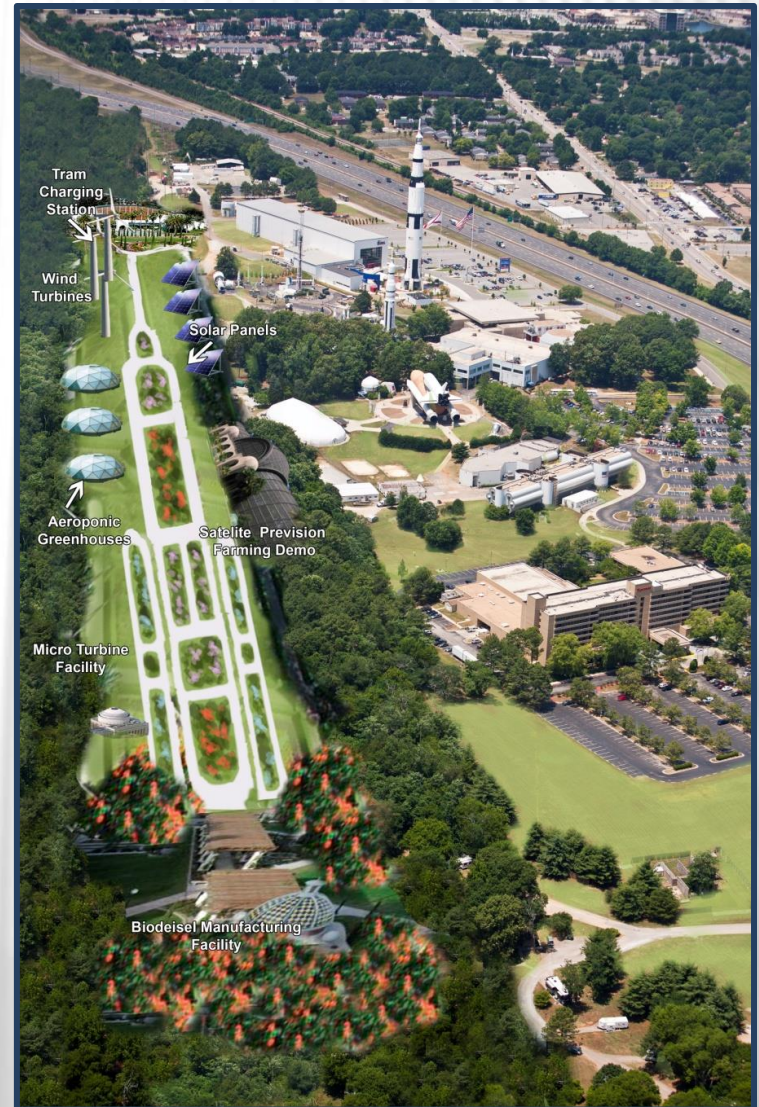
oped as a result of the need for self-sustaining energy generation and the conservation and re-use of resources in human space exploration," said Barnhart. "This collaborative effort is an exciting

way to bring these concepts 'down to earth,' make emerging energy technologies and ideas accessible to the general public and keep Huntsville on the leading edge of technology." •



Building an Energy Education Portfolio

- S-CO₂ Generator
- Electric vehicle charging station
- Wind Turbines
- Solar Panels
- Aeroponic Greenhouses
- Satellite Precision Farming Demo
- Biodiesel Manufacturing Facility
- Small Hydro Turbine
- Automotive: Green Car





TVA Easement

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Energy



Space

Defense

