

Exceptional service in the national interest

SANDIA'S ENERGY
PROGRAMS
...A VERY BRIEF PRIMER

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CESAM Workshop

Soccoro, New Mexico



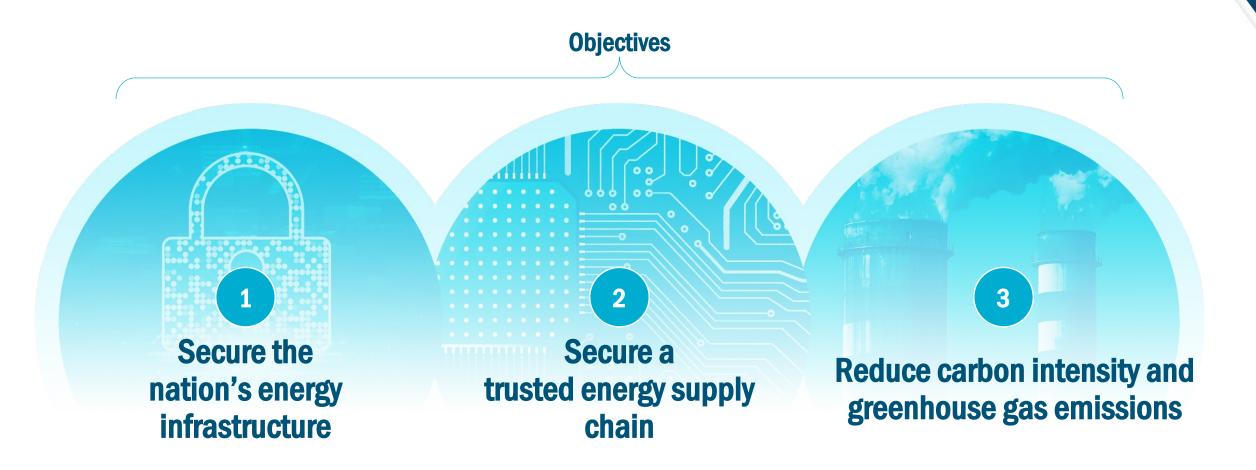
SANDIA HAS FIVE MAJOR PROGRAM PORTFOLIOS





ENERGY AT SANDIA

Our vision is to accelerate the transition to secure, resilient, and sustainable energy



WORKING IN ALL ASPECTS OF ENERGY



Clean Generation

Delivery & Storage

Energy Use



Renewable energy

Nuclear energy

Nuclear waste

Carbon management

Electric grid
Batteries
Strategic Petroleum Reserve
Biofuels
Hydrogen

Internal combustion engines Electric vehicles Industrial processes

Our Workforce

(Nuclear Fuel Cycle and Grid Modernization)





R&D ORGANIZATION

Higher percentage of PhDs than Sandia overall (42%)



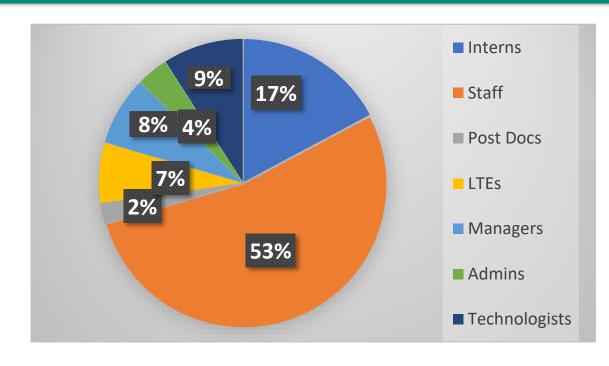
RELATIVELY YOUNG

Median 5.2 years with Sandia and 13 years since B.S.



DIVERSE BACKGROUNDS

- 50% Engineers
 - Aeronautical, Agricultural, Architectural, Chemical, Civil, Computer, Electrical, Energy, Environmental, Industrial, Manufacturing, Materials, Mechanical, Metallurgical, Nuclear, Petroleum, Structural, and Systems
- 10% Earth Sciences
- Many Others
 - Biology, Chemistry, Computer Science, Environmental Science, Health, Math, Physics, etc.



EMBRACING HYBRID/TELEWORK

- Staff (and 1 manager) in 16 states other than NM
- Year round students in an additional 5
- 30% of staff teleworks > 50%
- ~50 staff and contractors in Carlsbad, NM supporting the WIPP site, the nation's only permitted underground repository for nuclear waste.

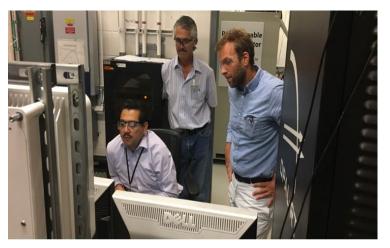
THE FUTURE OF ENERGY



Mitigating and adapting to climate change, as well as addressing threats to energy infrastructure, require urgent action. At Sandia National Laboratories, we're using our expertise to accelerate the transition to secure, resilient, and sustainable energy.











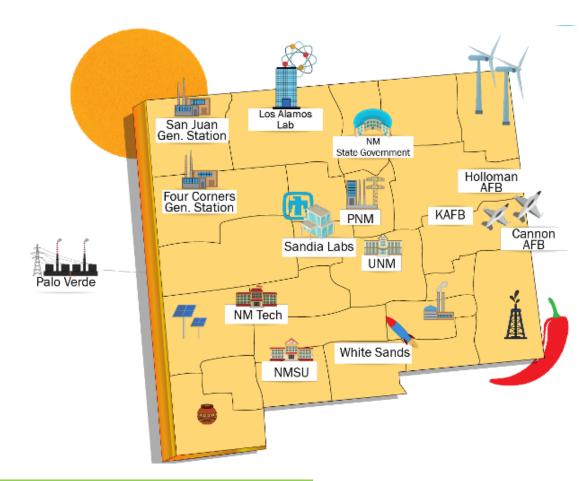
ESTABLISHING CRITICAL PARTNERSHIPS ACROSS NEW MEXICO



This is one version of Charlie's pre-COVID NM pitch...

New Mexico has the right mix of players to provide national leadership. Examples:

- Universities/workforce development
- National Laboratories
- Engaged state government
- DOD presence
- Utilities: IOUs and Coops
- Urban/rural/tribal representation
- Resource diversity
- Etc...



We need a venue for open, engaged, and continuous dialogue/collaboration