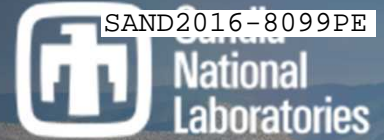


*Exceptional service
in the national interest*



*Exceptional service
in the national interest*



*Exceptional service
in the national interest*



Sandia
National
Laboratories



*Exceptional service
in the national interest*



Sandia
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Laboratories



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Laboratories



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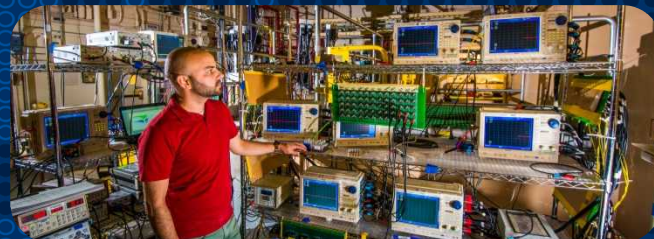


Sandia
National
Laboratories



*Exceptional service
in the national interest*



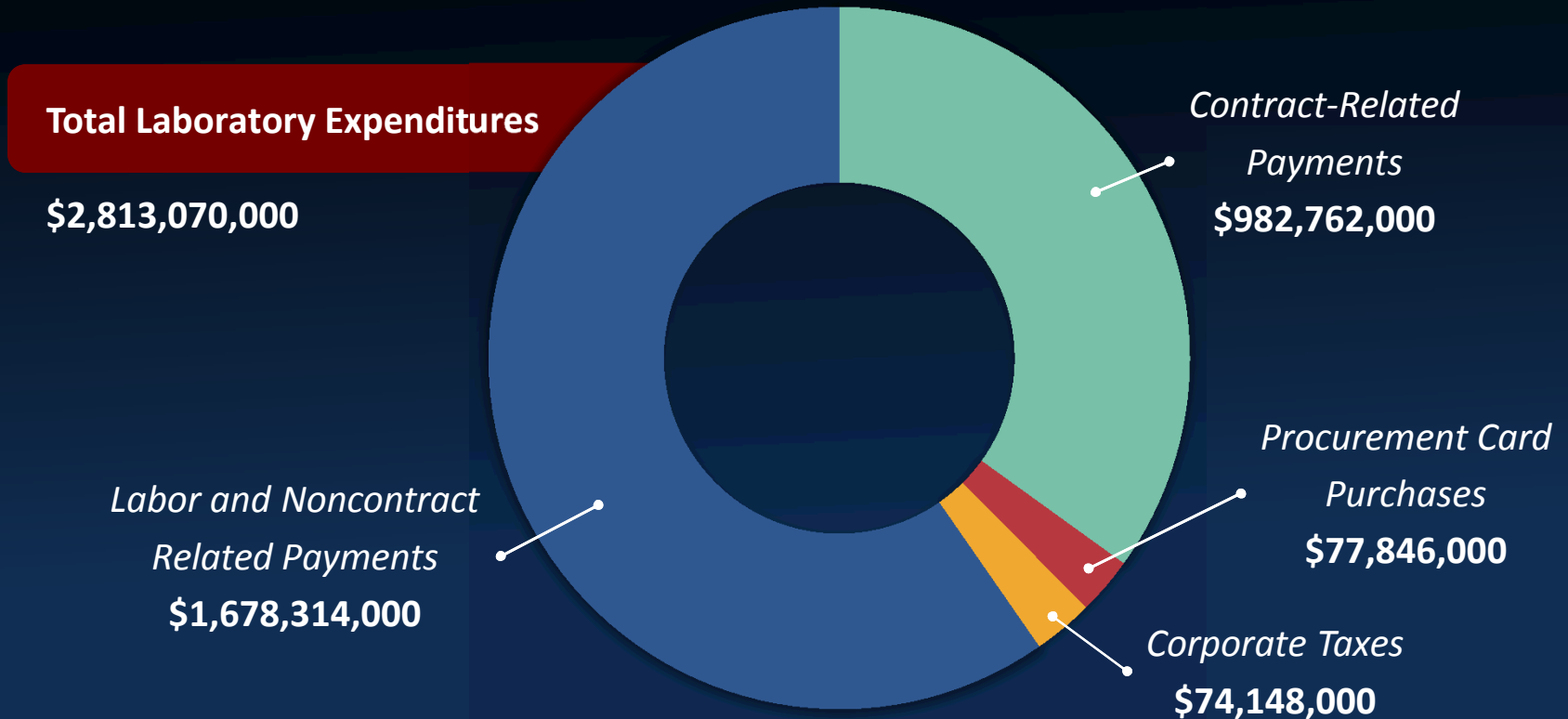


2016 Economic Forum Briefing

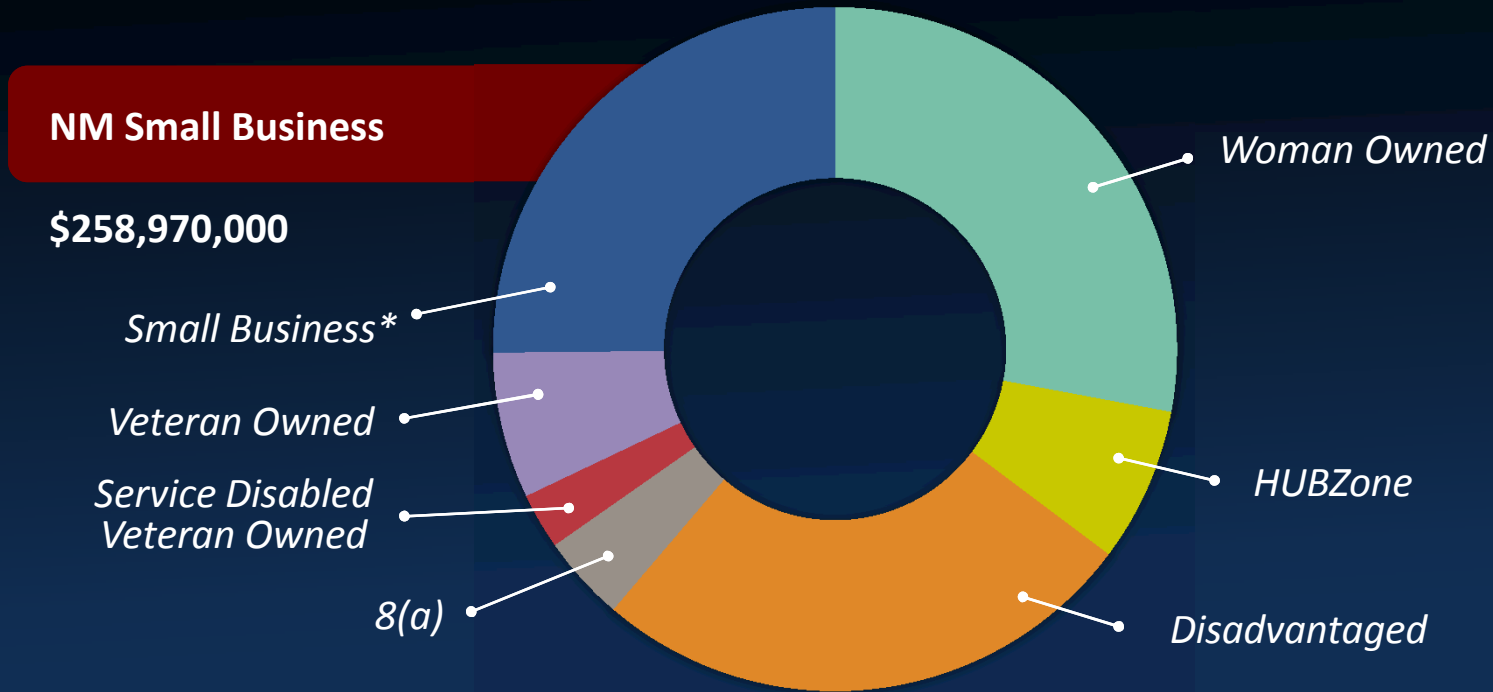
Jill Hruby
President and Laboratories Director

24 August 2016

Our economic impact



Our economic impact

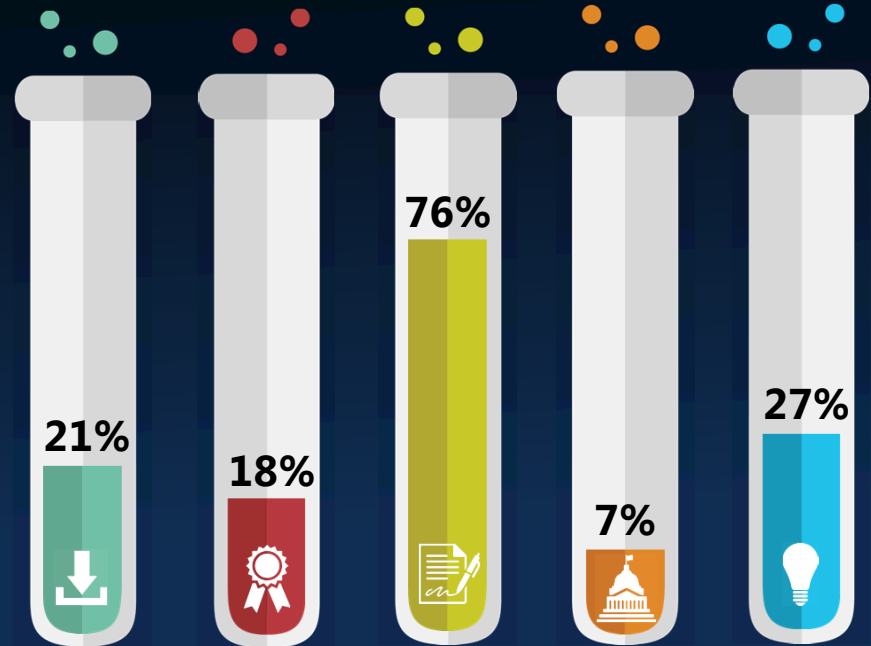


*Nonminority, nonwoman, nonveteran owned

Demonstrating intellectual property leadership

FY12 to FY15 increases

- Invention disclosures
- Patent filings
- Open-source software downloads
- Commercial licenses
- Government use notices



Stimulating local technology transfer

Licenses to New Mexico organizations from FY11 to FY15

Transitions of Sandia technology to local organizations more than doubled



AQUILA



Assisting small businesses in New Mexico

New Mexico Small Business Assistance Program

#197

BUSINESSES
RECEIVED
ASSISTANCE

\$2.3M

VALUE OF
ASSISTANCE

2014

2015

#205

BUSINESSES
RECEIVED
ASSISTANCE

\$2.4M

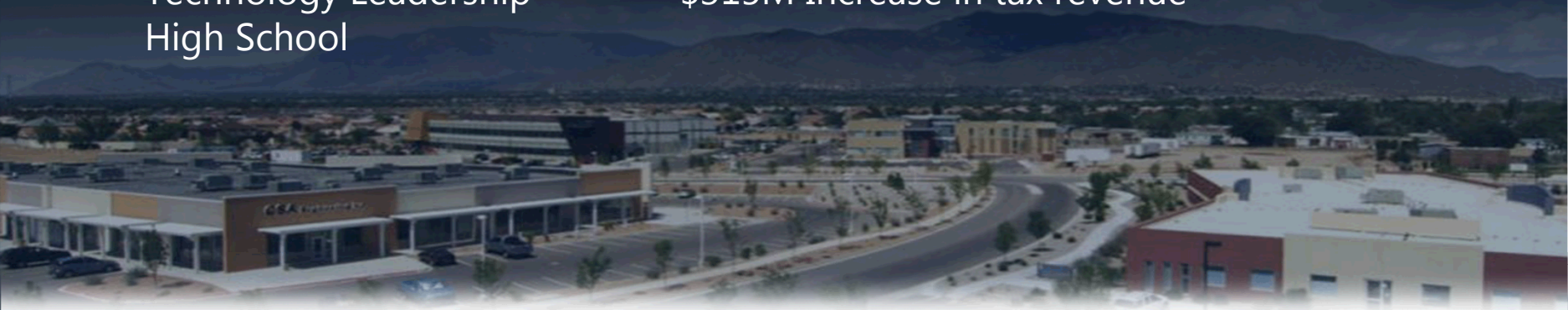
VALUE OF
ASSISTANCE



Catalyzing a technology community

Sandia Science & Technology Park FY15–FY16

- Five new small businesses
- Technology Leadership High School
- \$635M Increase in salaries and wages
- \$315M Increase in tax revenue



Planning for new partnership space and programs

Center for Collaboration and Commercialization (C3)

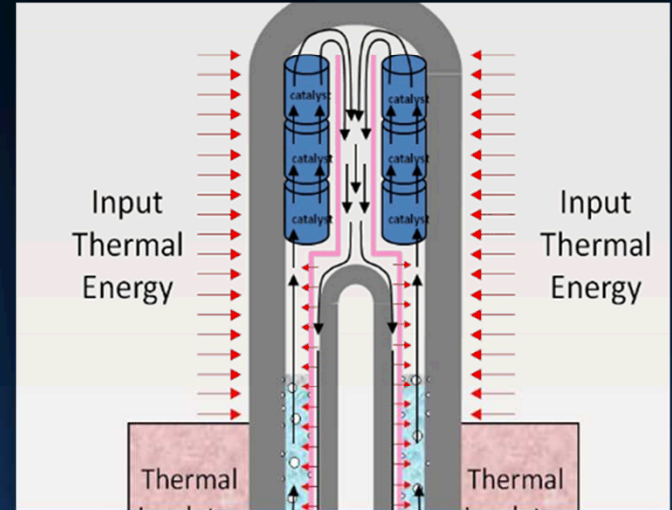
- Created conceptual design
- Developed business model for project
- Launched new *Entrepreneur Exploration* program



Making new technology available on the market

Local companies use Sandia-developed technologies

- Efficient fertilizer production
- Bayonet Reactor technology

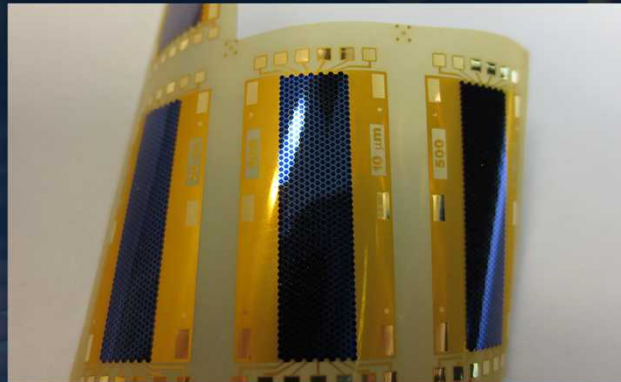


Hydrogen Inventions, Inc.

Making new technology available on the market

Local companies use Sandia-developed technologies

- Commercializing Sandia's microsystems-enabled photovoltaics (MEPV) technology



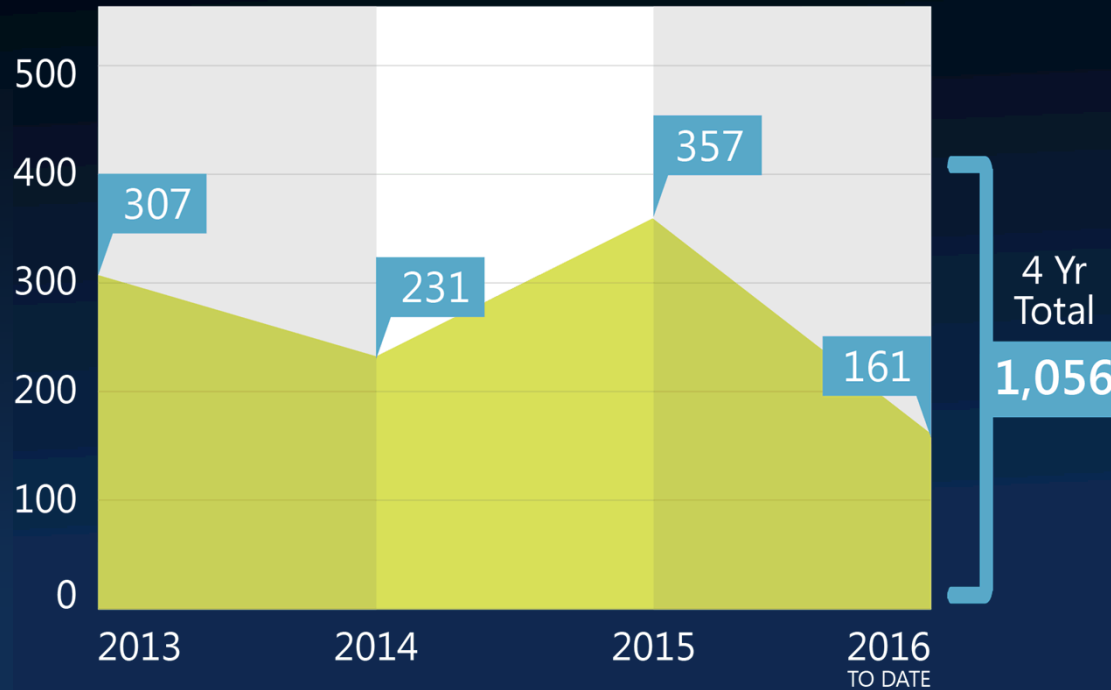
 mPower

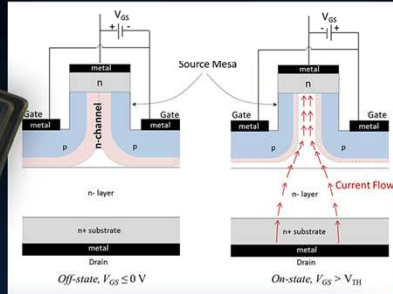
Academic alliances

- Collaborating on the nation's toughest problems
- Shaping the future of engineering and science
- Commercializing and deploying technology
- Developing the STEM workforce



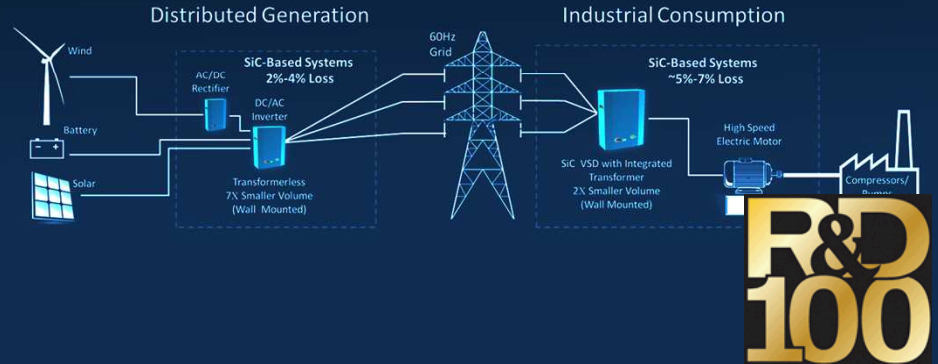
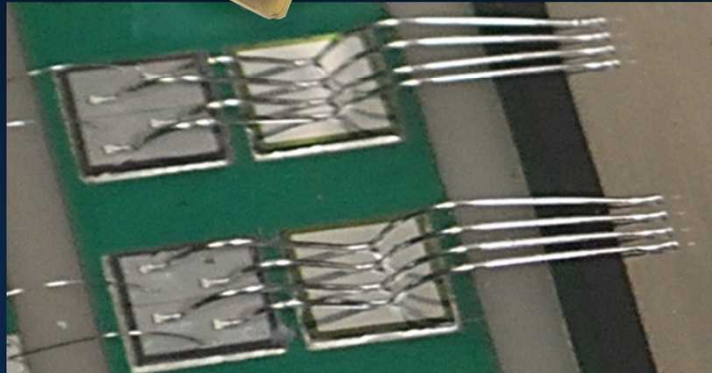
Regular hires from NM universities





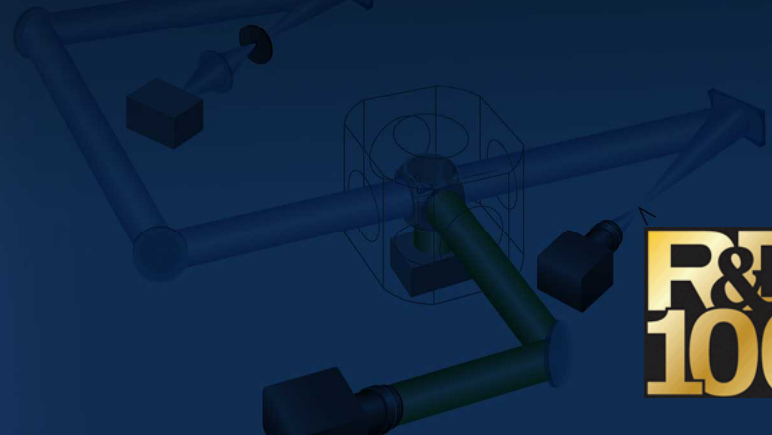
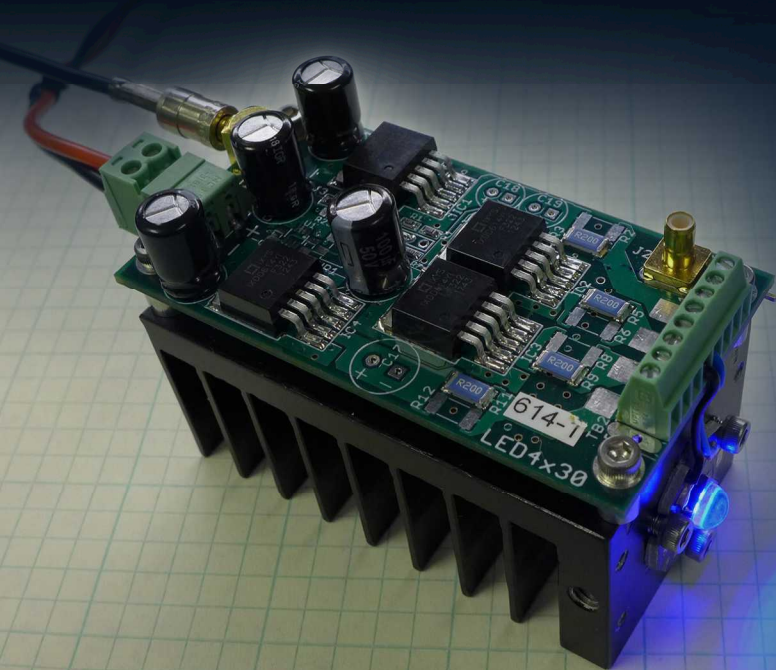
Silicon Carbide Junction Field-Effect Transistor Switch

Improving efficiency for a future smart grid revolutionized by power electronics



LED Pulser

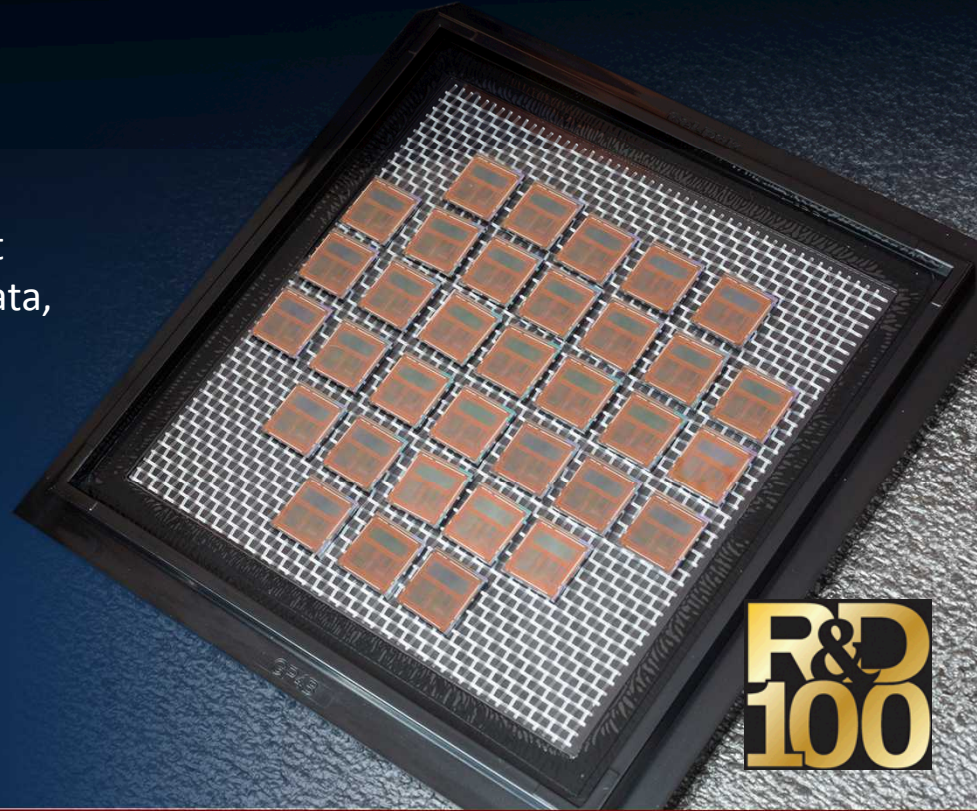
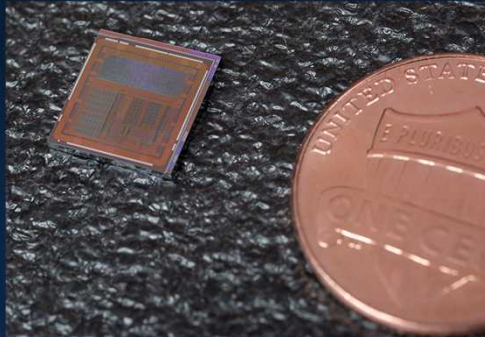
High-brightness, fast-pulsed, multi-color light-emitting diode (LED) driver provides illumination for scientific, industrial, or commercial use

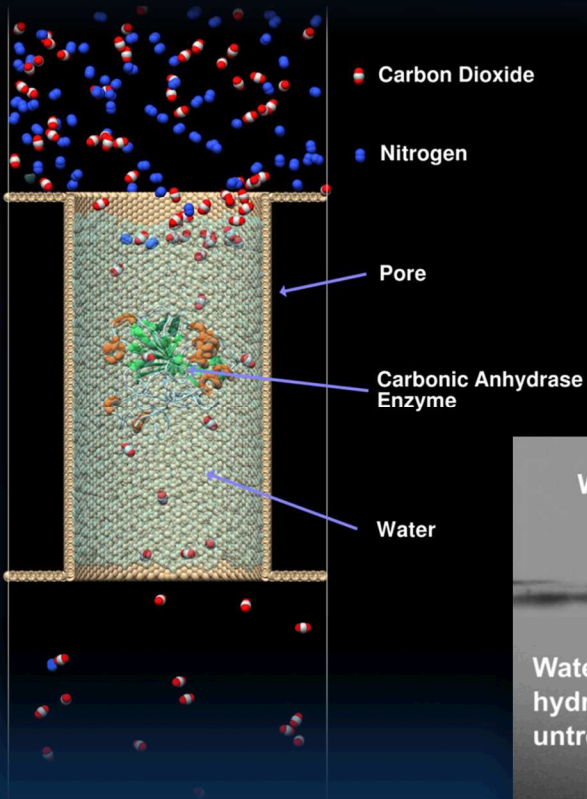


**R&D
100**

Integrated Circuit Identification

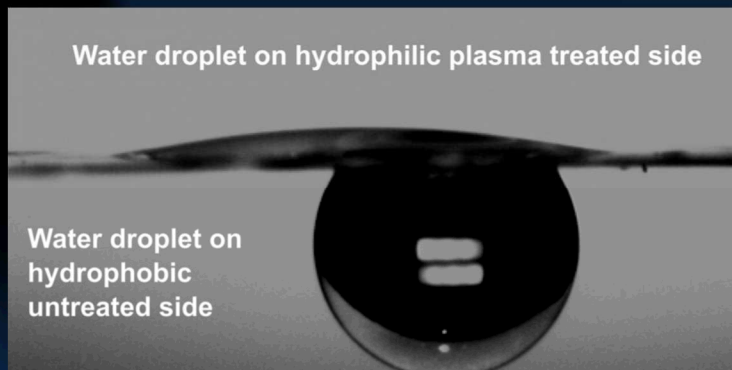
Clone-proof encryption technology can detect counterfeit electronics, verify identity, protect data, and prevent fraud





CO₂ Memzyme

First cost-effective technology for achieving CO₂ separation to help lower greenhouse gas emissions from coal power plants



Additionally selected for the
2015 R&D100 Green Technology
Special Recognition Gold Award

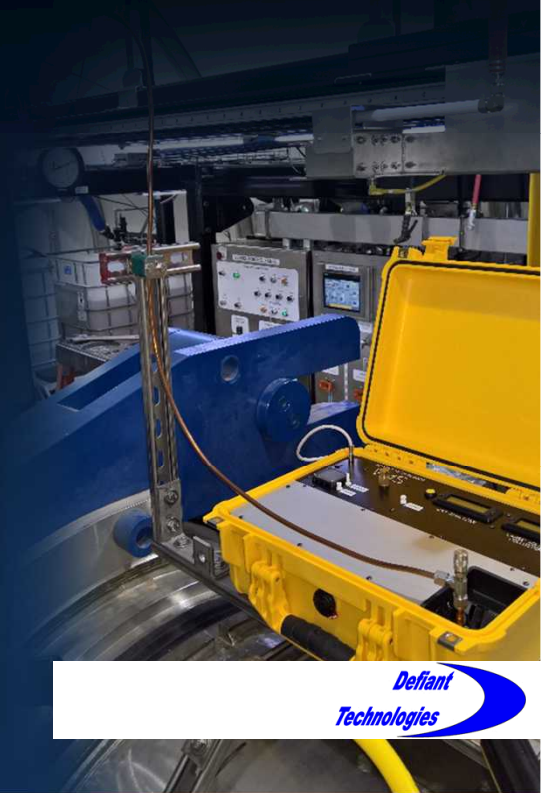
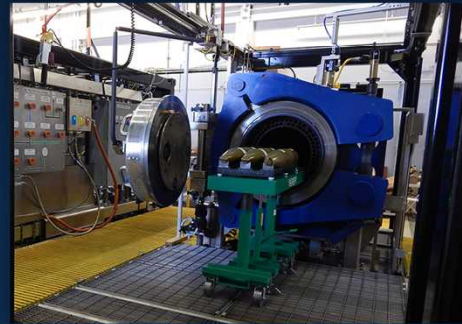


R&D
100

Safely destroying chemical munitions

Sandia partners with Defiant Technologies to support the US Army

- The US Army uses Sandia's Explosive Destruction System (EDS) to destroy recovered chemical munitions
- A partnership between Sandia and *Defiant Technologies* is developing a new chemical-agent monitoring and detection system that can be used with EDS operations or other applications



**Defiant
Technologies**

Sandia hosts two Nuclear Nonproliferation Treaty visits

- Learning about Sandia's multidisciplinary work and its role in the nonproliferation goals of the U.S. government



Developing technology for the warfighter

Capability for measuring the down-range crosswind to enable more accurate long-range shooting



Supporting major nuclear weapons programs

- B61-12 Life Extension Program
- W88 ALT 370
- Mk21 Fuze Replacement
- W80-4 Life Extension Program
- Mobile Guardian Transporter



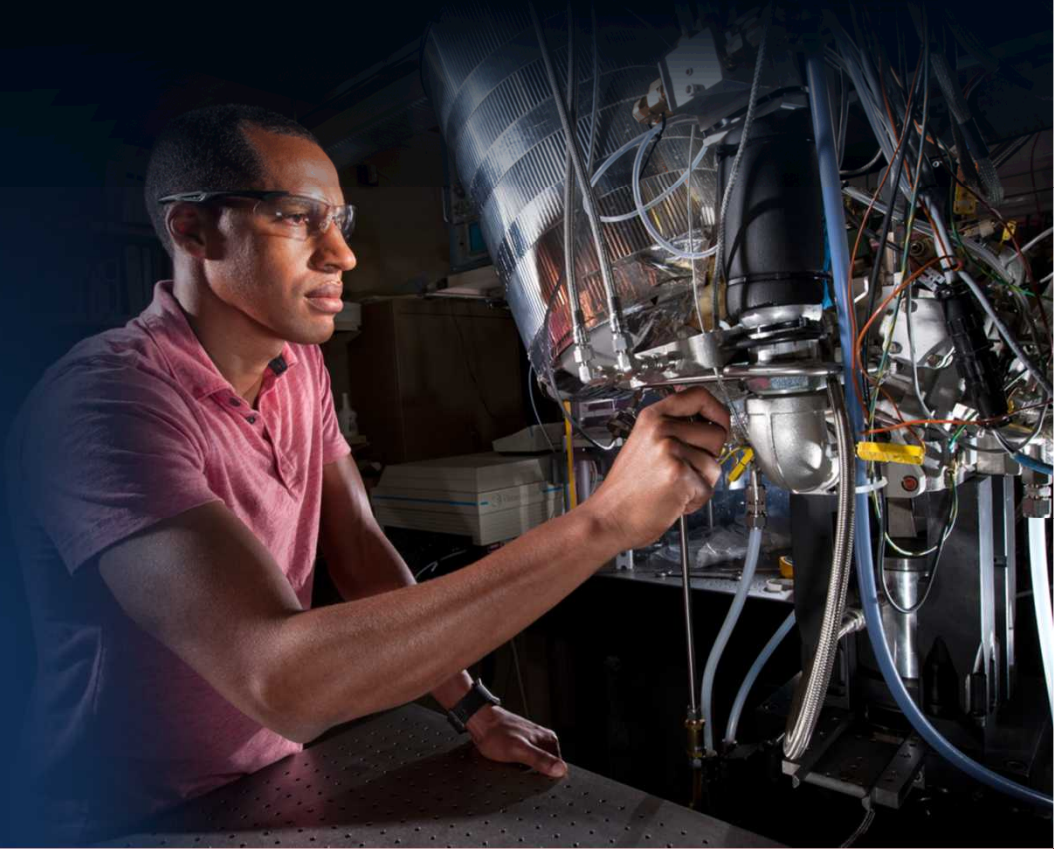
Sandia's role in the clean energy revolution

- Mission Innovation
- Breakthrough Energy Coalition
- Big Ideas Summit
- Other events

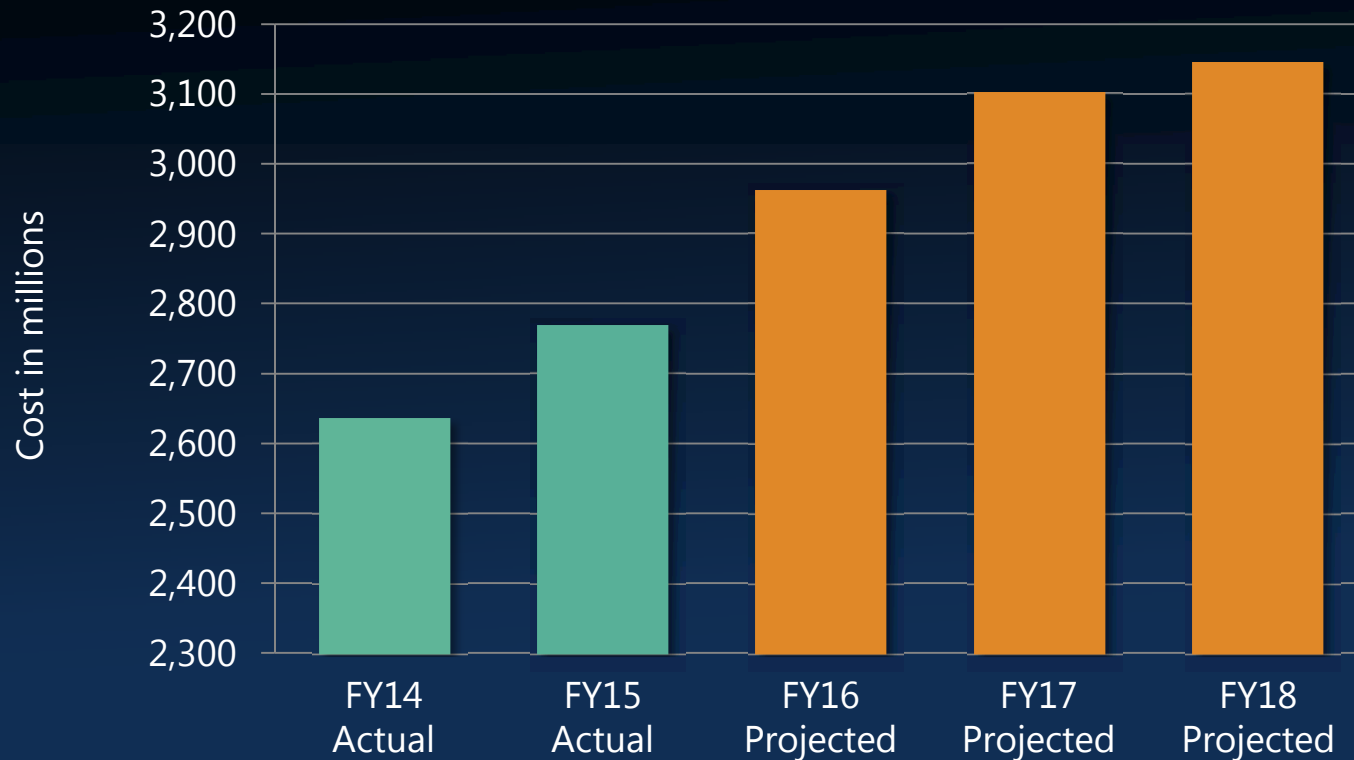


Working toward fuel economy goals

Sandia's low-temperature gasoline combustion (LTGC) engines reduce emissions and improve fuel economy

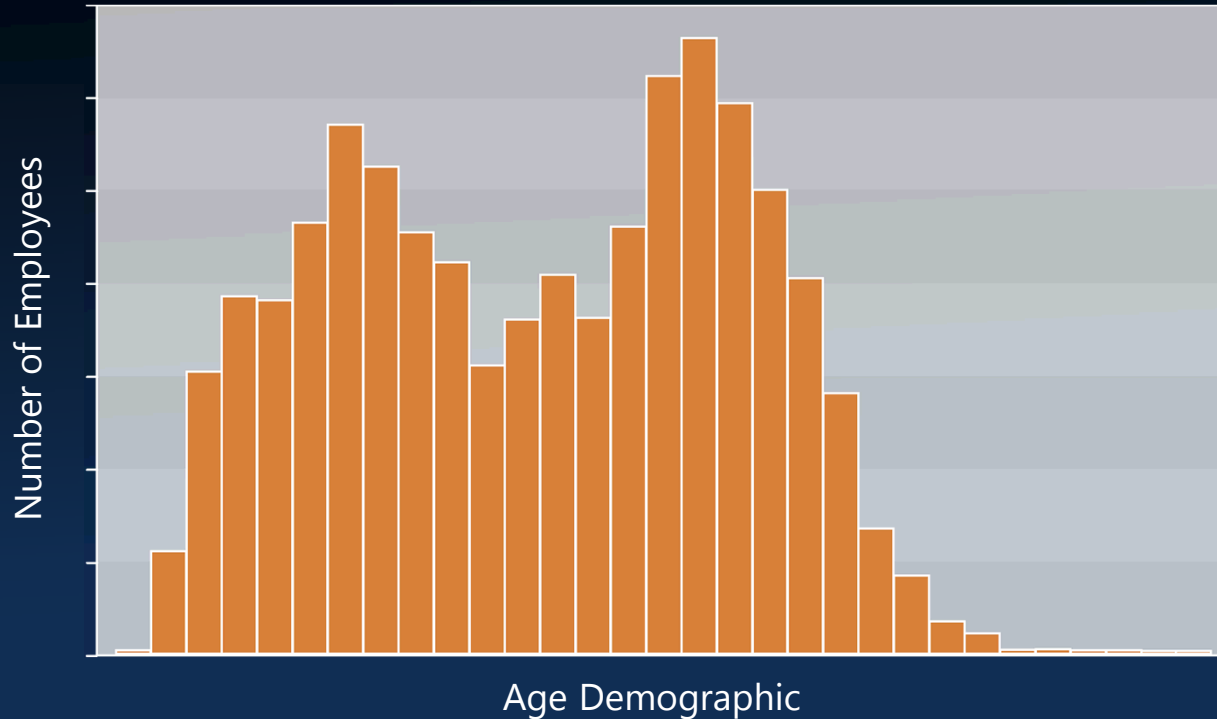


Growing impact on national security



Focusing on our people

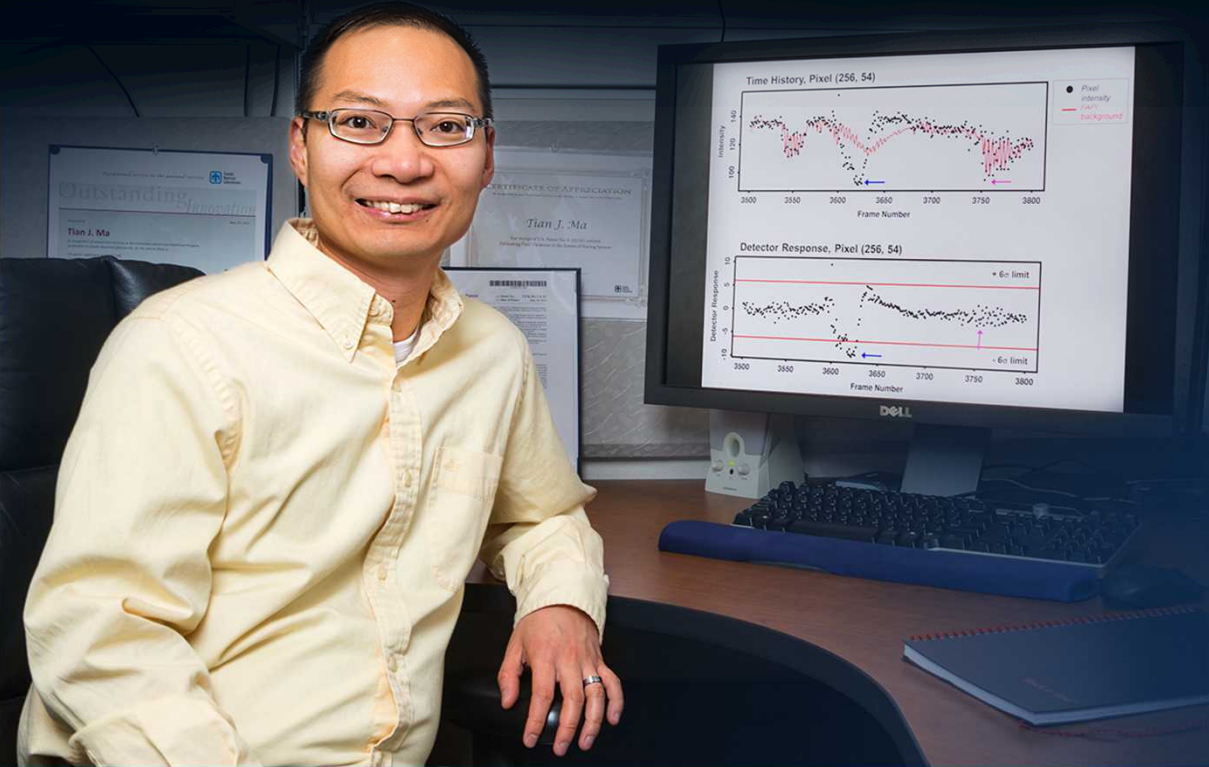
Today's demographic makeup



~10,000 regular employees

~3,300 with <5 years of service

Cultivating excellence: AAEOY



Tian Ma

2016 Most Promising Asian
American Engineer of the Year

Cultivating excellence: BEYA



Ken Holley

2016 Black Engineer of
the Year

*Community Service
Award*

Cultivating excellence: BEYA



Conrad James

2016 Black Engineer of
the Year

*Special Recognition
Award*



Cultivating excellence: Early Career Awards

Melissa Teague

Presidential Early Career Award

*Pioneering improved
understanding of fuel in a nuclear
reactor*



Cultivating excellence: Early Career Awards

Robert Kolanski

DOE Early Career Research
Program Award



Making a difference in our communities



I give because I can help make a difference.
Julie Thai
Employment, Staffing, and Recruiting Specialist
Human Resources
United Way Contributor for 2 years

I give because I want to give back.
Charles Robinson
Engineering Support Technologist
Research & Development
United Way Contributor for 4 years

We give because social responsibility is important to us.
Imani & Shauna Adams
R&D S&E, Systems Engineering Research & Development
United Way Contributors for 4 years

We give because dreams should be within reach.
DAVID & SARAH BIRWELL
David Burwell
Business Management Professional
General Business Management
Sarah Burwell
Project Controller
Project Management
United Way Contributors for 4 years

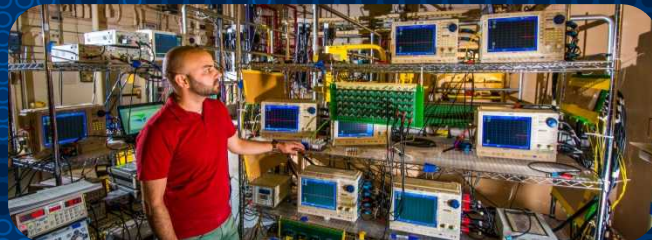
Sandians have different reasons to donate, but we are united in our mission to give.
Visit give.sandia.gov to begin or continue your support today.

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\$6.9 million



2016 Economic Forum Briefing

Thank you for coming!