



Edison Electric  
INSTITUTE

# **The Role of Microgrids, Solar Energy, and Storage in Community Resiliency**

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National Association of State Energy Officials  
September 19, 2017

Wally Mealiea  
Senior Manager, Business Continuity Policy

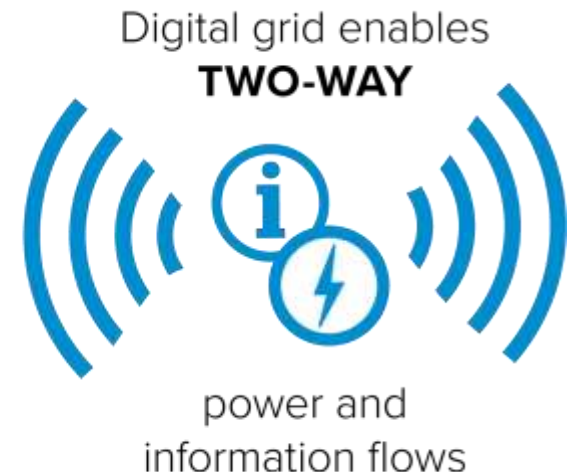
# Smarter Energy Infrastructure

**Projected: \$52.8 Billion Invested  
in the Energy Grid in 2016**



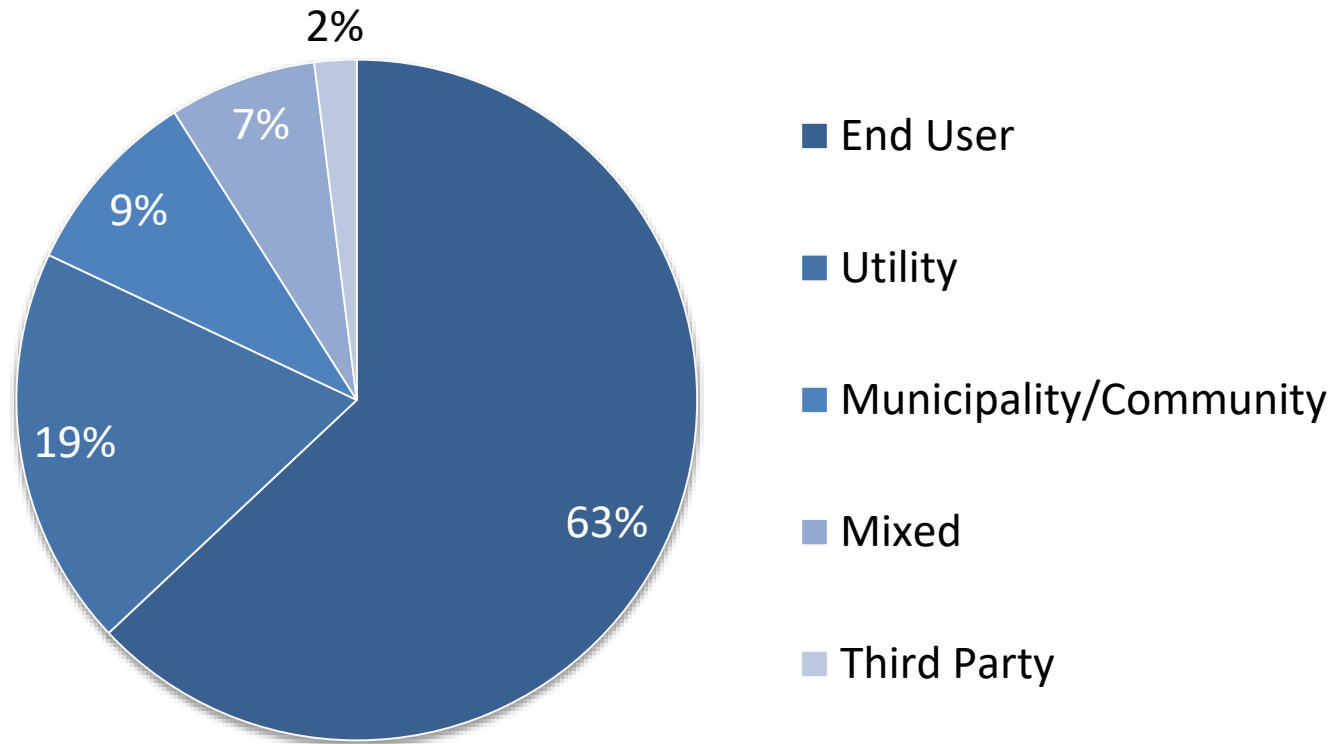
**SMART METERS**  
give more than half  
of all U.S. households  
more control and flexibility

Electric companies  
**INVESTED**  
**\$32B**  
in the  
distribution grid  
in 2016



# Microgrids: A Winning Partnership

**Project Count: 174 Microgrids**



# Adding More Non-Hydro Renewable Resources to the Mix

Our universal solar projects accounted for

**72%** of all

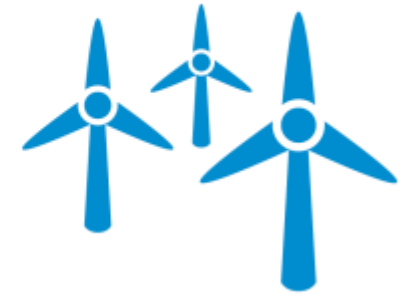
**INSTALLED U.S. SOLAR CAPACITY** in 2016.



**OUR SOLAR PV**  
had an average  
cost of  
**\$1.06**  
per watt in 2016

COMPARED TO

**RESIDENTIAL  
ROOFTOP SOLAR PV**  
had an average  
cost of  
**\$2.89**  
per watt in 2016



Our wind projects provide almost

**100%**

of wind energy nationwide.

# Energy Storage Technology

**Using more than 90% of all energy storage in the U.S.**

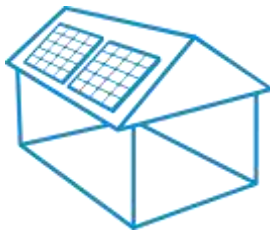
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## What is stationary energy storage?

Stationary storage is capable of taking electric output and converting it into another form of energy for use on demand.

## What are the benefits?

### For Homes



Storing solar and wind power could increase time off grid by 2-4 hours.

### For Businesses



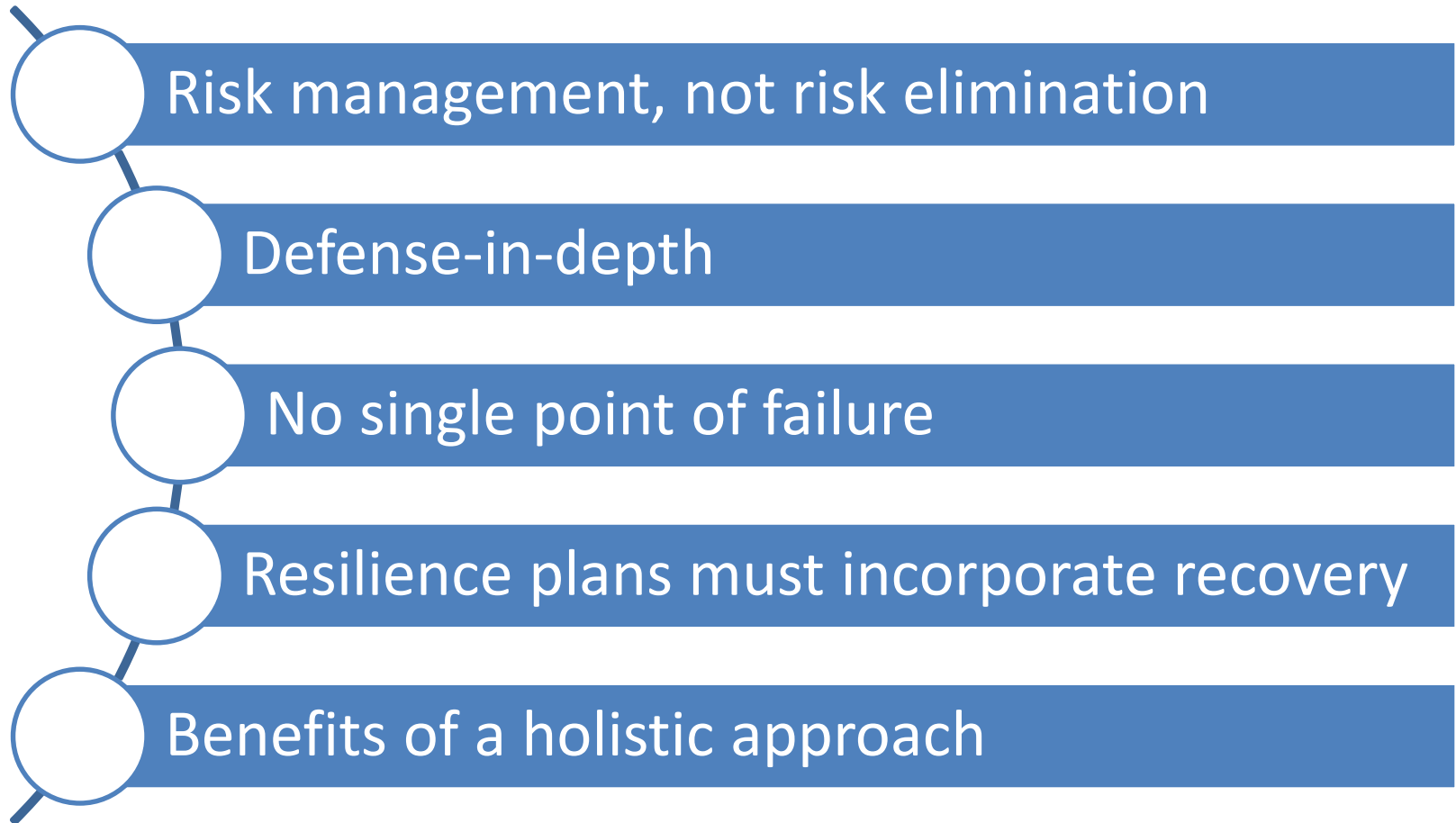
Control of power costs reduces downtime and production losses.



### For Electric Companies

Improved efficiencies in demand-side management, generation, and transmission.

# Our Approach to Resilience



# Grid Security: Industry-Government Partnership

## Electricity Subsector Coordinating Council Stakeholders



### GOVERNMENT

- Federal Agencies
- Regulators
- PMAs
- Law Enforcement
- State, Local, Tribal, & Territorial
- Canadian Agencies & Provinces



### INDUSTRY

- Electric Companies
- Trade Associations
- ISOs & RTOs
- NERC
- E-ISAC
- Canadian Electric Companies



### EXTERNAL GROUPS

- Other Critical Sectors
- Vendors
- Critical Customers
- Media

# Addressing Threats to the Energy Grid

## **The Electricity Subsector Coordinating Council is focused on improving the security of the energy grid:**

- The ESCC plans and exercises coordinated responses to attacks or major disruptions to the grid.
- The ESCC makes sure information about threats is communicated quickly between government and industry.
- The ESCC deploys government technologies on electric company systems that improve situational awareness of threats to the grid.
- The ESCC coordinates closely with other critical infrastructure sectors.





**The Edison Electric Institute (EEI)** is the association that represents all U.S. investor-owned electric companies. Our members provide electricity for 220 million Americans, and operate in all 50 states and the District of Columbia. As a whole, the electric power industry supports more than 7 million jobs in communities across the United States.

Safe, reliable, affordable, and clean energy powers the economy and enhances the lives of all Americans.

EEI has more than 60 international electric companies as International Members, and hundreds of industry suppliers and related organizations as Associate Members.

Organized in 1933, EEI provides public policy leadership, strategic business intelligence, and essential conferences and forums.

For more information, visit our Web site at [www.eei.org](http://www.eei.org).

