



ENERGY RESILIENCE OPEN HOUSE

21 AUG 2018



1740 – 1745	Call to Order / Welcome Resilience Definition Review	Mr. David McGeown
1745 – 1805	Air Force OEA Mission Update	Mr. Robert Hughes Mr. David Irwin
1805 – 1825	Navy REPO Mission Update	Mr. John Kliem
1825 – 1845	Army OEI Mission Update	Mr. Michael McGhee Mr. Jermaine Hector
1845 – 1900	Moderated Q&A	CDR Walter Ludwig
1900	Close	Mr. Michael McGhee



10 USC 2911

The Secretary of Defense shall ensure the readiness of the armed forces for their military missions by pursuing energy security and energy resilience.

10 USC 101 (e) (6)

*The term “**energy resilience**” means the ability to **avoid, prepare for, minimize, adapt to, and recover** from anticipated and unanticipated energy disruptions in order to ensure energy availability and reliability sufficient to provide for mission assurance and readiness, ~~including task critical assets and other~~ mission essential operations related to readiness, and to execute or rapidly reestablish mission essential requirements*

NDA19 change

Headquarters U.S. Air Force

Integrity - Service - Excellence

U.S. Air Force Office of Energy Assurance



Mission Assurance through Energy Assurance



Air Force Office of Energy Assurance



ENERGY STOREFRONT

MISSION

Deliver creative installation energy resiliency solutions to meet 21st century threats.

VISION

The recognized leader for implementing innovative energy assurance solutions that provide the Air Force with mission-ready installations.

OBJECTIVE

Oversee Air Force facilities energy program by consolidating requirements, leveraging partnerships and monitoring the execution of facilities energy projects.



Storefront for Creative Energy Solutions

Execute innovative solutions for local energy challenges

⚡ Integrate diverse energy assets such as alternative generation, controls, efficiency, and storage to increase resilience

⚡ Use third-party financing such as ESPCs, UESCs, EULs and PPAs to create mutually beneficial solutions to energy challenges







**Submit your solutions online via OEA's Request for Information:
go.usa.gov/xUebU, solicitation #: W912DY-18-U-OEA1**

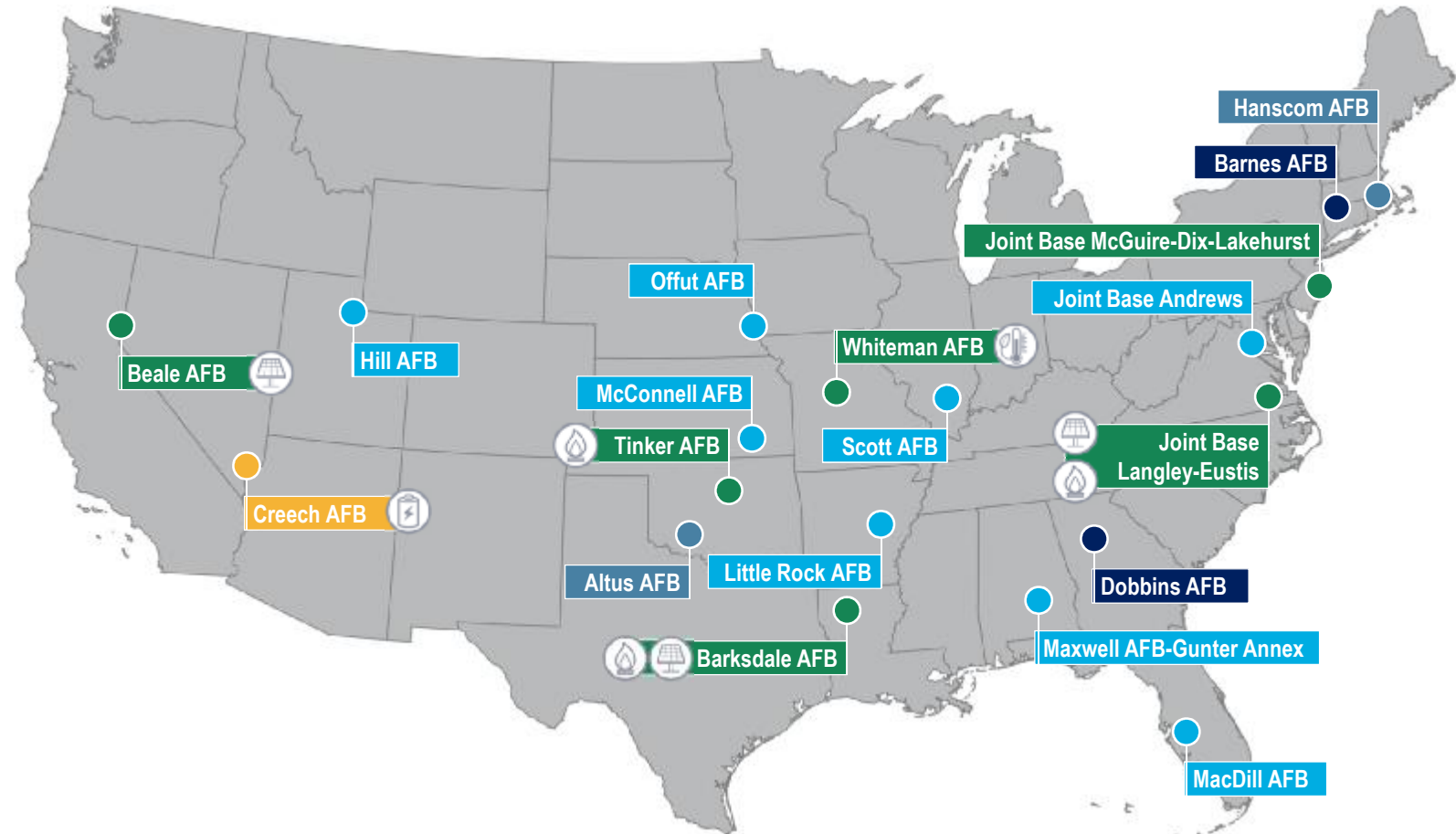


OEA Project Concepts & Opportunities

MAP KEY

- Current project concepts
- Project concept and MERC sites
- EaaS pilot sites
- Engaged sites
- Engaged MERC sites

-  Battery
-  Natural Gas
-  Combined Heat and Power
-  Solar



Map is current as of June 2018. Project concepts and opportunities may change during the project lifecycle.



OEA Engagement at Joint Base McGuire-Dix-Lakehurst

Resilience Need: Support Air Force, Army and Navy critical missions

RESILIENCE BENEFITS



Backup power to critical missions in grid outage



Resilience investment opportunities



Regional power stability



ENHANCED USE LEASE PROJECT DETAILS

Site large commercial natural gas power plant on Dix portion of JB MDL via outgrant

In-kind / cash consideration for land outgrant to be used towards JB MDL resilience investments

Completed RFI and Industry Exchange in March 2018

POWER PURCHASE AGREEMENT PROJECT DETAILS

Procure 16,000,000+ kWh of resilient, locally-generated power; Capable of islanding 6-12 MW of critical load at JB MDL

Technology agnostic; Expected to be sited on an off-base parcel

Completed RFI in June 2018



Contact OEA

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Stay Connected!

- ▶ Submit you energy ideas: WWW.SAFIE.HQ.AF.MIL/PROGRAMS/ENERGY/OEA
- ▶ Subscribe to OEA Updates: [HTTP://WWW.SAFIE.HQ.AF.MIL/PROGRAMS/ENERGY/OEA/OEA-UPDATES/](http://WWW.SAFIE.HQ.AF.MIL/PROGRAMS/ENERGY/OEA/OEA-UPDATES/)
- ▶ Continue the conversation on social media:  [Air Force Energy Program](#)  [@AFEnergy](#)



Resilient Energy Program Office



U.S. DEPARTMENT OF THE NAVY

REPO
RESILIENT ENERGY PROGRAM OFFICE

REPO – Why We Are Here



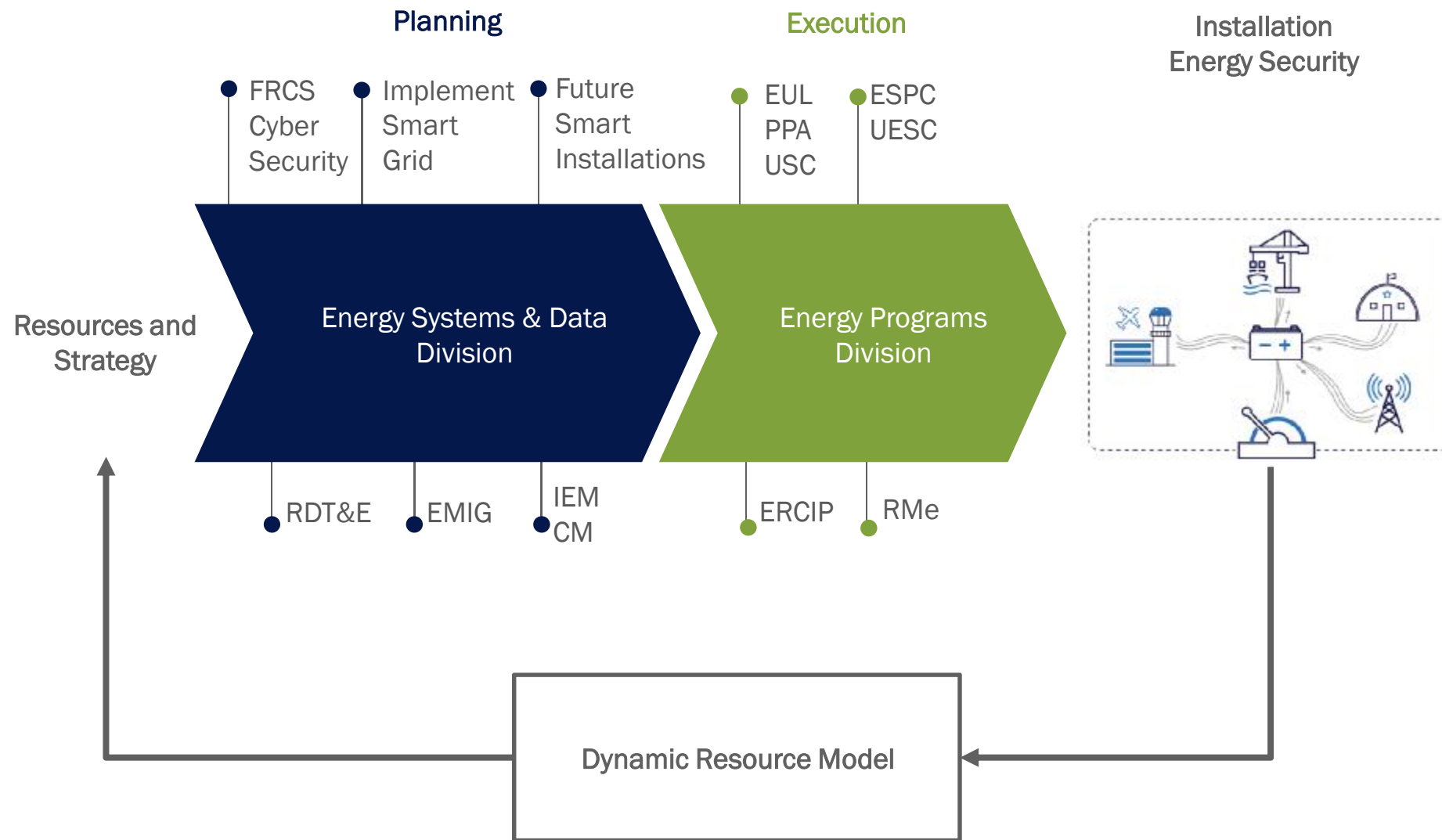
Vision

Cost-effective and high-performing installation energy infrastructure now and in the future strengthening Department of Navy warfighter superiority.

Mission

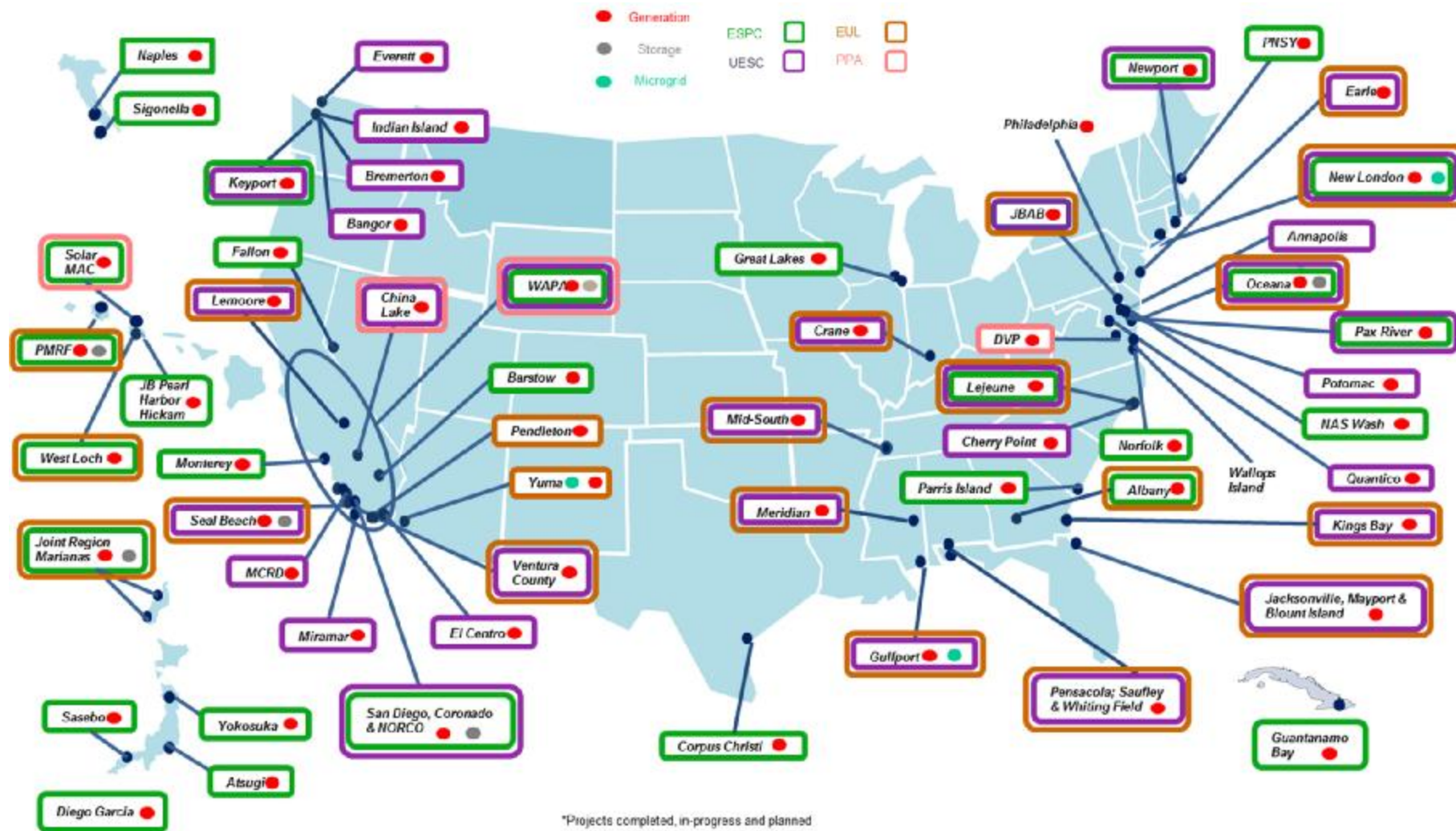
Deliver installation energy security solutions to provide access to efficient, resilient, and reliable energy optimizing use of private and appropriated funds.

REPO Functional Alignment



REPO Projects

(as of March 2018)



Contact REPO



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OFFICE OF ENERGY INITIATIVES

Securing Army installations with *energy*
that is *resilient*, *affordable*, and *sustainable*

Enhancing Army Readiness through Energy Resilience

Assistant Secretary of the Army (Installations, Energy & Environment)



The Office of Energy Initiatives



- Enhances mission readiness by adapting changes in the energy business to modernize aged installation energy systems that were not designed for the complex requirements of modern battle systems
- The Army's central office with expertise supporting commanders to identify, fund, build, and operate resilient energy capabilities to:
 - Reduce the risk of power disruption emergencies through preparedness, mitigation, and prevention activities
 - Develop response and recovery capabilities
 - Manage energy costs
- Collaborates with the private sector to attract innovation and capital

***Army installations were
without power for a
combined
10,300 hours in 2017***



Energy Resilience Drives OEI Priorities



"It is now undeniable that the homeland is no longer a sanctuary. ... attacks against our critical defense, government, and economic infrastructure must be anticipated"

National Defense Strategy 2018

"The Secretary of Defense shall ensure the readiness of the armed forces for their military missions by pursuing energy security and energy resilience"

10 USC 2911

- **Improve Mission Readiness**

- Energy and water resources are critical mission enablers required to train, sustain, and deploy a globally responsive Army

- **Modernize Energy Systems**

- New capabilities emerging from advances in distributed energy, smart grids and storage technologies

- **Reform Army Business Practices**

- Attract private sector capabilities and capital to ensure Army energy systems are equipped with best capabilities to withstand modern threats



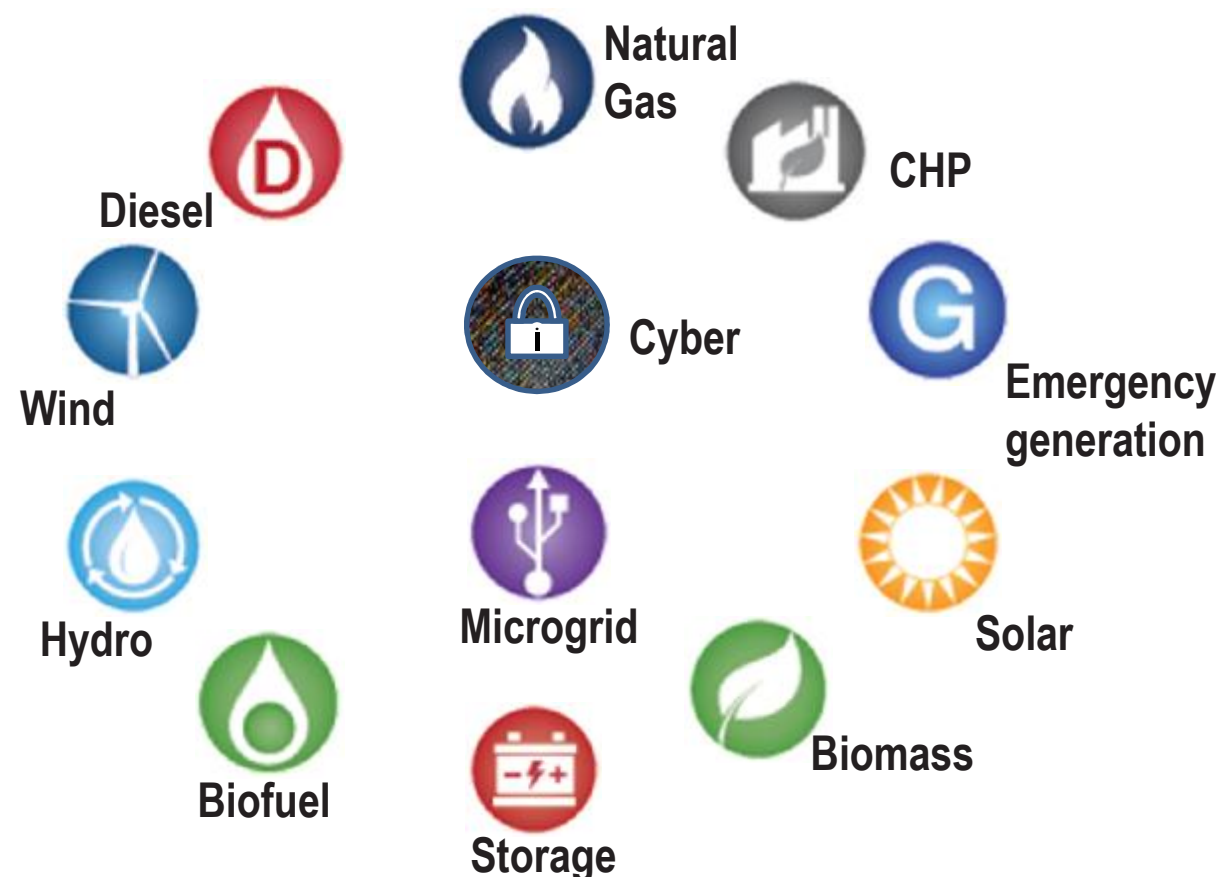


Installation Energy Resilience Concept



- Army Directive 2017-07 (Installation Energy and Water Security Policy) for Mission sustainment:
 - Assured access to resource supply (14 days supply for critical missions)
 - Reliable infrastructure condition
 - Effective system operations

Resilient Installations May Combine





A Model For Army Resilience



Assistant Secretary of the Army (Installations, Energy & Environment)



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Initiatives

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