

U.S. Army Reserve Base Realignment & Closure (BRAC) – Sustainable Design & Construction in Action

**Presented to the
Environment, Energy Security & Sustainability Symposium
New Orleans, LA**

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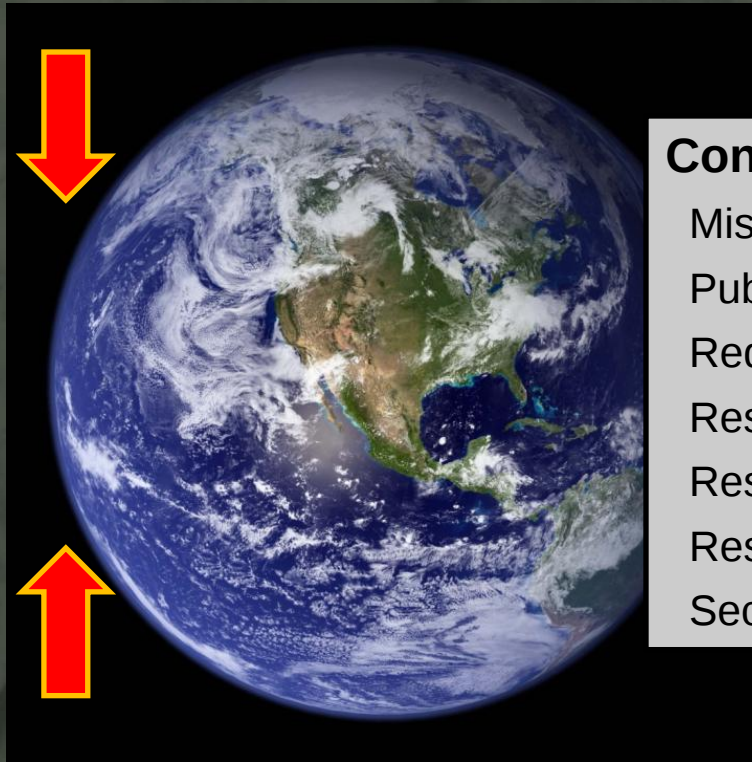
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The Challenge

Supply of life-supporting resources
Declining

Rising
Consumption of life-supporting resources



Consequences:

- Mission constraints
- Public concerns
- Reduced well-being
- Resource scarcity
- Resource degradation
- Resource competition
- Security threats



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National Security Implications

“Competition for water, resources, and food is going to increase the international friction. Estimates are that energy supplies are not going to equal demand even if you count in what people are trying to do in the interim to increase it or look for alternative sources. Climate change [and] natural disasters create friction, create tensions and population movements and pandemics.”

U.S. Army Chief of Staff



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The Army Reserve...

...represents:

- more than 2/3 of the Army's Expeditionary Sustainment Commands
- nearly half of the Army's Supply Units
- 100% of the Army's Water Supply Battalions, Theater Engineer Commands

...is comprised of:

over 206,000 highly skilled Citizen-Soldiers with a broad range of specialties that are valuable in both the military and civilian sectors



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The Army Reserve – Full-Spectrum Operations at Home and Abroad

VISION: As an enduring operational force, the Army Reserve is the premier force provider of America's Citizen-Soldiers for planned and emerging missions at home and abroad. Enhanced by civilian skills that serve as a ***force multiplier***, we deliver vital military capabilities essential to the ***Total Force***.

MISSION: Provide trained, equipped and ready Soldiers and cohesive units to meet global requirements across the full spectrum of operations.



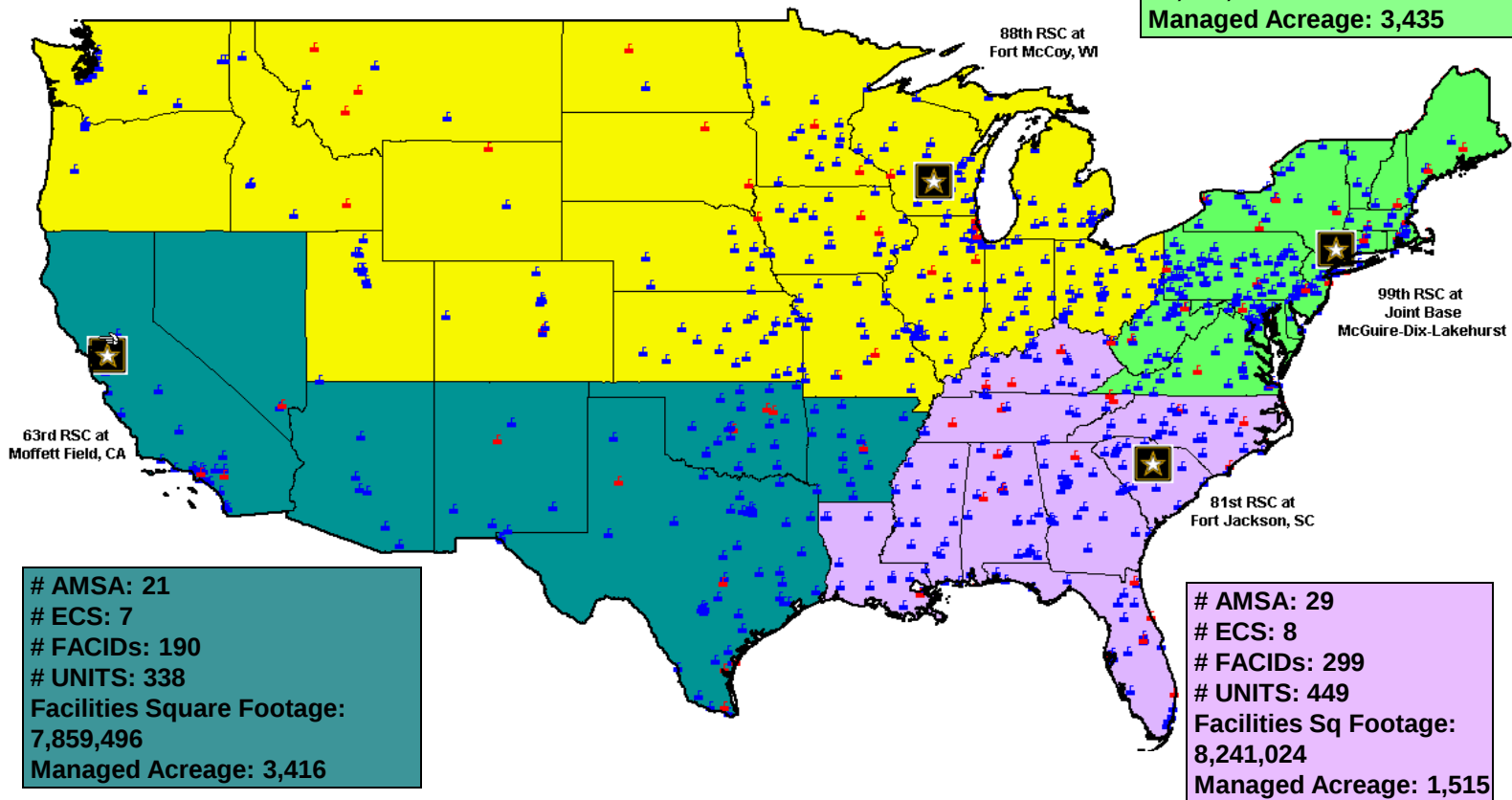
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The Army Reserve – A Regionally Based, Federal Force

AMSA: 40
ECS: 7
FACIDs: 336
UNITS: 654
Facilities Square Footage:
15,643,277
Managed Acreage: 11,468

Bldg Avg. Age
39.2 years

AMSA: 25
ECS: 6
FACIDs: 286
UNITS: 472
Facilities Square Footage:
10,218,980
Managed Acreage: 3,435



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The Army Reserve's Mission for Energy

The AR implements an efficient, effective and proactive energy program that reduces demand; seeks and exploits renewable/alternative energy sources; and promotes sustainability throughout the force to seamlessly integrate with Army Energy Security Goals (ESG); supports operational and infrastructure energy initiatives; increases visibility of the AR's energy security needs; and generates the implementation of an energy security culture throughout the force.



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The Army Reserve's Vision for Energy



An efficient, effective and proactive Army Reserve energy program characterized by innovation and synchronization across all Army Reserve Core Enterprises that will support the Army Force Generation (ARFORGEN) process, ensure success in operations and services, maintain infrastructure success and sustain Soldiers, Civilians and their Families.



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BRAC - The Basis for Sustainability Change in the AR

Base Realignment and Closure Act of 2005 (BRAC)

- BRAC created an opportunity for the Army Reserve to transition from a Strategic Force to a more efficient, agile and responsive *Operational Force* via **Operation Millennium Transformation**
- BRAC created opportunities reduce the number of substandard and undersized Reserve facilities; divesting in old infrastructure and streamlining the Army Reserve's "footprint" in communities.
- Under BRAC, 125 new, **modern, efficient Army Reserve Centers** were constructed, and 176 older facilities were closed.



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BRAC 2005 - Engine of Change

Overall Execution



Reflected in AR Transformation Campaign
Plan/OPORD MILLENNIUM TRANSFORMATION

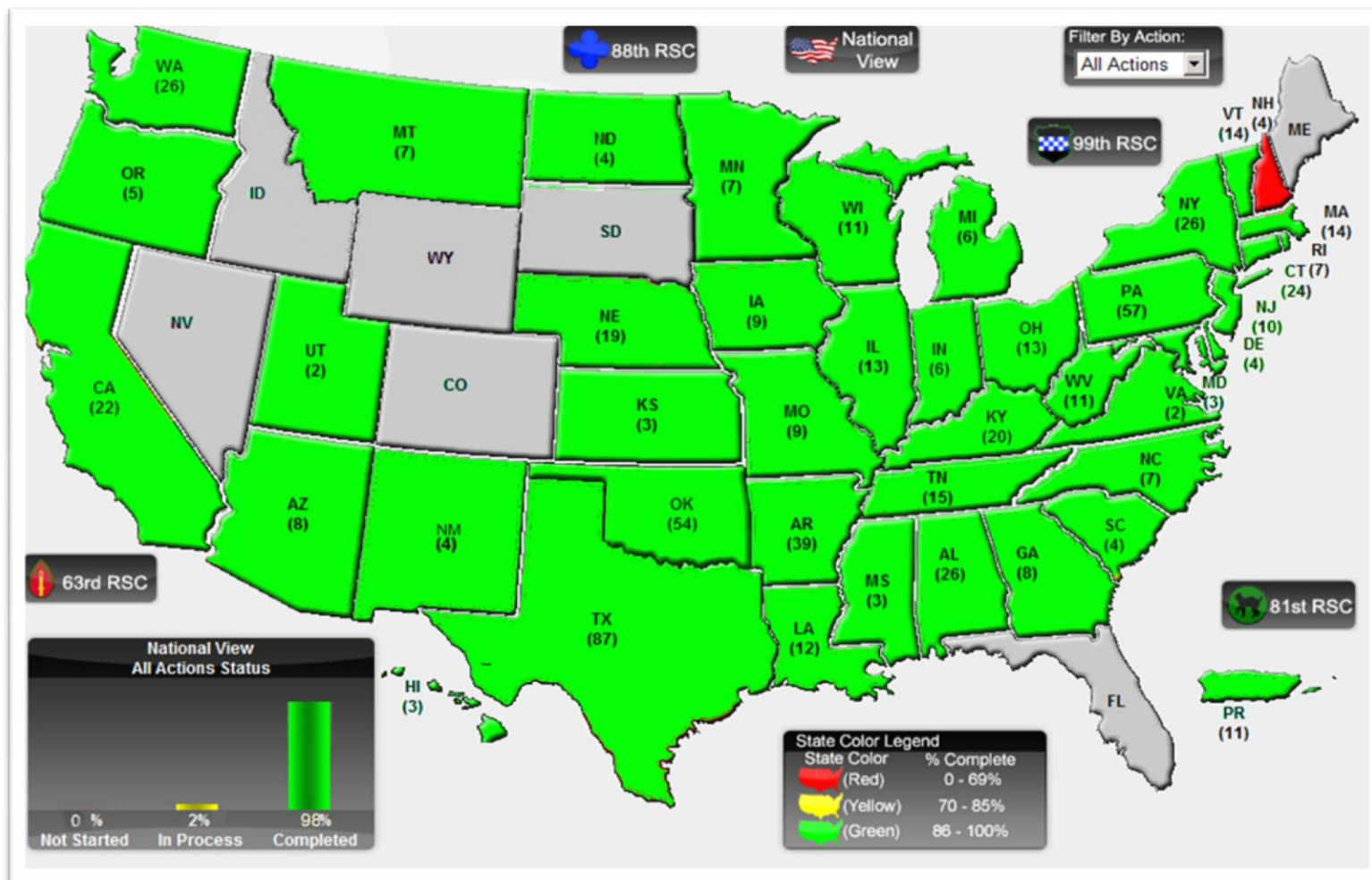
- Construct 125 new Joint / Multi-Compo Armed Forces Reserve Centers
 - 73 AR lead constructions
 - 52 ARNG lead constructions
- Close 176 Army Reserve (AR) Facilities
- Acquire 30 commercial properties
- Disestablish 12 Regional Readiness Commands (RRC)
- Establish 4 Regional Support Commands (RSC)
- Realign 3 AR headquarters to new locations
- Realign AR Command and Control (ARC2) into operational command structure
- Activate 8 Sustainment Brigades & 5 Sustainment Commands from existing structure NLT FY08

Implementation NLT end of FY11 (by law)



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Overall State of Execution (O/A 15 Sep 2011)



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LOOKING THROUGH THE LENS OF THE TRIPLE BOTTOM LINE ...



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Army Reserve – Sustainable Construction

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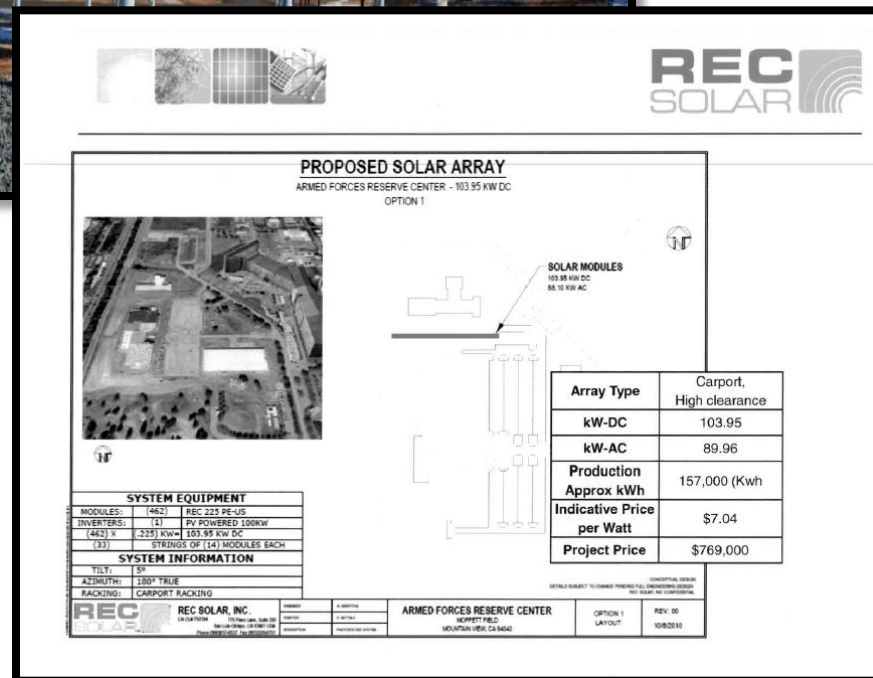
Armed Forces Reserve Center Middletown, CT June 2011



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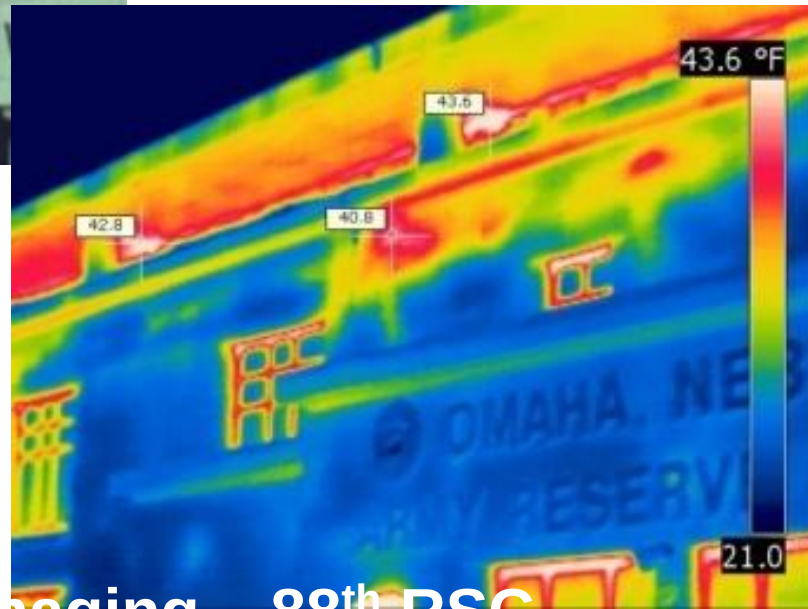
Army Reserve – Photo-Voltaic

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Army Reserve – Thermal Imaging

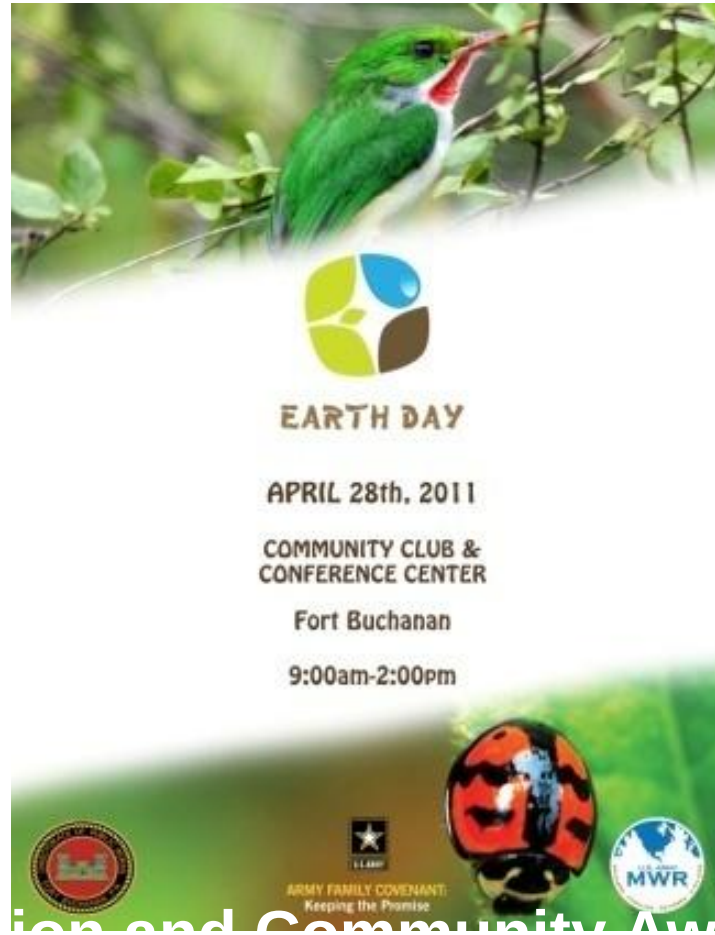


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Army Reserve – Community Awareness & Strategic Communication



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Army Reserve – Wind Power

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Army Reserve – Hydrogen Fuel Cells

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Army Reserve – Alternative Energy Vehicles

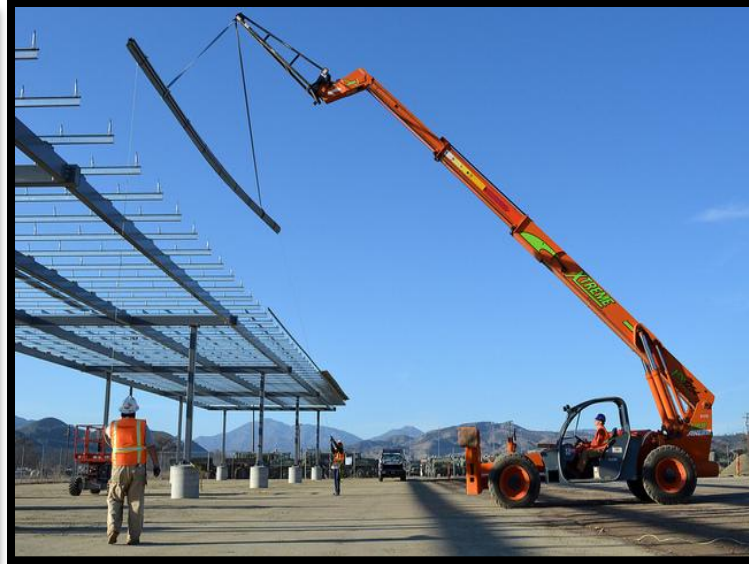
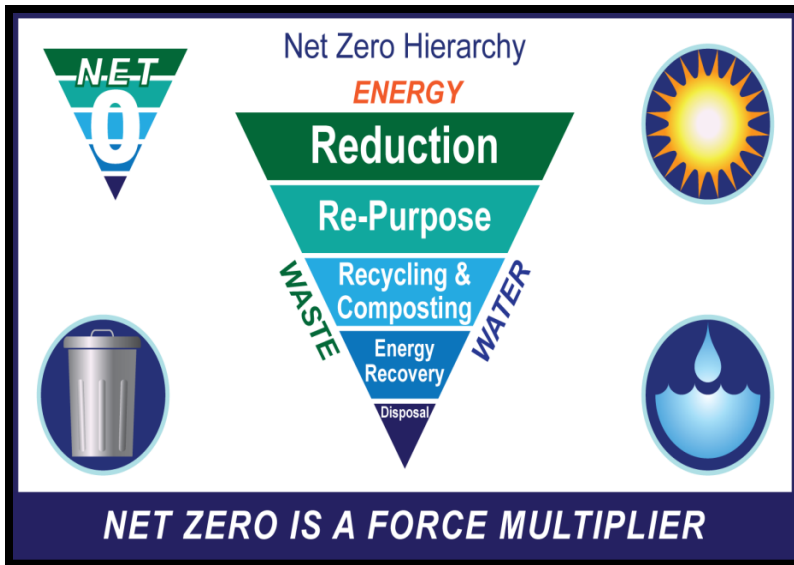
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Army Reserve – Net-Zero

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Army Reserve – Metering

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Army Reserve – Environmental Programs

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Army Reserve – Operational Energy

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The Way Ahead

- Incorporating Net-Zero concepts into our facilities as well as our installations
- Expanding our Operational Energy Program to incorporate E⁴SK ('Expeditionary-Emergency-Exercise-Everyday') Concepts
- Developing educational programs and training for Soldiers, Leaders, Civilians and Families
- Army Reserve senior leadership is dedicated to embracing alternative energy and sustainable practices, making the Reserve an example for the rest of the military.
- Our Soldiers will have the energy resources required for training, deployment or support to civil authorities in any future contingency. This will enable the Army Reserve to remain an operational force—standing ready to respond to domestic emergencies while protecting national security interests abroad.
- Civilians in our communities will be ensured reliable access to energy resources.
- The Army Reserve will coordinate interdependent resources, harmonizing functions and sharing information to implement mature technologies and develop emerging ones.
- Army Reserve Soldiers will gain advanced skills that will give them a competitive advantage in the job market.



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CONSERVE:

**.There
is NO
planet
B.**



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“Yes, there are two paths you can go by, but in the long run, there's still time to change the road you're on...”



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The Challenge

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“Do what you can, with what you have, where you are.”

- - - Teddy Roosevelt



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