

RESOURCE GUIDE

2019 ENERGY ACTION MONTH

Energy Resilience Enables Army Readiness



U.S. Army photo by Sgt. Shawn Morris

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What Is Energy Action Month and Why Do We Participate?



U.S. Army photo by Spc. Shanteria Hester

2019 ENERGY ACTION MONTH

Energy Action Month is an Army-wide awareness campaign designed to educate Soldiers, Civilians and Families about energy resiliency, security, efficiency, and conservation; enhance their understanding of Army energy initiatives; encourage their participation in these efforts; and share our energy success stories with our peers and the general public.

Energy Action Month occurs every October. All Army Commands are encouraged to participate and host activities and events at their respective sites. As a land-holding Command, the United States Army Reserve participates in Energy Action Month and encourages all Installations, Readiness Divisions and Mission Support Command to do so as well.

Why is energy important?

From the electricity that powers our facilities to the fuel that powers our vehicles, energy touches nearly every aspect of the Army Reserve's mission. However, there are many threats to our energy security: increasing global demands for energy, natural disasters, fluctuating

fuel costs and innovative adversarial attacks like cyberweapons, to name a few concerns. We must help ensure Soldiers have the energy they need, when they need it and where they need it—even in the face of an energy crisis. This is a concept known as energy security. Energy conservation and efficiency efforts contribute to the Army Reserve's energy security, and they reduce our operating costs.

Furthermore, Army Directive 2017-07, Installation Energy and Water Security Policy, mandates that the Army "prioritize energy and water security requirements to ensure available, reliable power and water to continuously sustain critical missions ..." and "reduce risk to critical missions by providing the necessary energy and water for a minimum of 14 days."

The Army Reserve Sustainability Programs provide energy and water solutions to harden Army Reserve facilities to help ensure that land, air, and water resources are always available for the timely citizen-Soldier response.

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2018 Energy Conservation and Resilience At a Glance

Decreasing Energy Use

The Army Reserve continued to aggressively implement an energy and water program focused on security and mission resilience. In FY18, these efforts saw an 11.06% decrease in energy use intensity (EUI) compared to the FY15 baseline, keeping the Army Reserve on target to achieve the goal of decreasing EUI 2.5% annually through 2025.

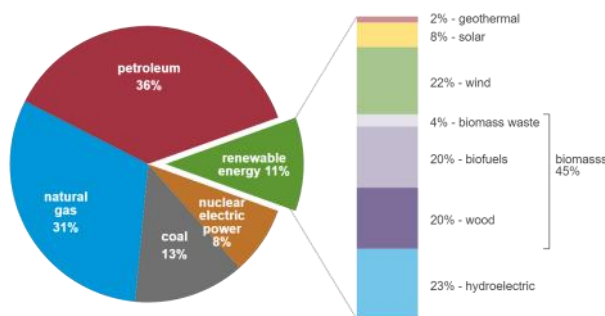
Renewable Energy Performance

The Army Reserve produced 43,627 Million British Thermal Units (MMBtu) of renewable energy in FY18. As reported in the Army Energy and Water Reporting System (AEWRS), the Army Reserve is at 3.9% of the 2007 National Defense Authorization Act (2007 NDAA) renewable energy goal and 7.2% of the Energy Policy Act of 2005 (EPACT 2005) goal. The 2007 NDAA requires 25% of all energy to come from renewable sources of supply by 2025 and EPACT 2005 requires not less than 7.5% of total electricity consumption to come from renewable sources.

U.S. primary energy consumption by energy source, 2018

total = 101.3 quadrillion British thermal units (Btu)

total = 11.5 quadrillion Btu



Note: Sum of components may not equal 100% because of independent rounding.
Source: U.S. Energy Information Administration, *Monthly Energy Review*, Table 1.3 and 10.1, April 2019, preliminary data

Implementing Holistic Security Strategies

We continued to pivot away from implementing projects in order to meet goals or mandates, and instead concentrated on planning and executing a holistic energy and water security (E&WS) focused strategy enhancing readiness and resilience, and improving the operational capability of Soldiers. This pivot is well-illustrated by the enclave in Ceiba, Puerto Rico. The project includes solar PV, battery storage, conventional standby generators, hardened infrastructure, and a microgrid. When complete, the

Ceiba enclave will be able to operate completely independent of the commercial grid. The lessons learned throughout the design and execution of the Ceiba project will be used as a model for resilience planning at Reserve Centers across the Army Reserve enterprise.

Innovative Project Planning

- **Virtual Installation Energy & Water Plan Pilot (v-IEWP).** In FY18, a coordinated effort was launched to address the unique E&WS challenges for the “virtual installations” with a pilot v-IEWP at the 63rd DIV(R). A team developed a Reserve-specific approach modifying the Headquarters Department of the Army (HQDA)-developed Installation Energy and Water Plans for the geographically dispersed assets of the virtual installations. The effort leverages past work in Net Zero, energy and water efficiency, microgrids, and onsite energy and water generation.
- **Enterprise Building Control System (EBCS).** In FY18, the Army Reserve expanded a pilot project to integrate remotely located Reserve Centers into an “enterprise” building control system to facilitate remote monitoring, control, and retuning of facilities. The Army Reserve integrated 36 buildings during the proof-of-concept pilot program and is currently working to integrate an additional 95 buildings in a second phase.
- **Innovative Technology Demonstrations.** In FY18, a solar-powered potable rainwater harvesting system, funded by the Army’s Installation Technology Transition Program (ITTP), is was tested at Fort Buchanan in Puerto Rico. This system uses all solar power with battery backup to collect, treat, and store enough clean drinking water to meet all the water needs of the buildings included in the test site. Additionally, the Army Reserve began testing a phase change material at the BT Collins Army Reserve Center in Sacramento, California. This material will increase energy efficiency at facilities by capturing extra heat during the day and releasing it at night to reduce heating and cooling loads.

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Events and Initiatives

Want to host an Energy Action Month event but not sure where to start? Here are some ideas:

- Conduct Building Energy Monitor training.
- Observe the energy use in your facilities, and report any incidents of waste or opportunities for conservation to your facility manager, Building Energy Monitor or the Army Reserve Installation Management Directorate. Encourage others to do the same!
- Host tours of your Installation, Readiness Division or Mission Support Command's renewable energy sites.
- Ask a Senior Leader at your Installation, Readiness Division or Mission Support Command to create a public service announcement for Energy Action Month. Coordinate the effort with your Public Affairs Office and Senior Leader's office, and distribute the video across media outlets.
- Ask your followers on social media to share their most innovative energy conservation ideas with the hashtag #EnergyActionMonth.
- Partner with Installation, Readiness Division or Mission Support Command media and/or Public Affairs Office so they can compose articles about your energy programs and projects.
- Host an energy conservation competition between Army Reserve Centers. Ideas include:
 - Compare month-to-month energy consumption at participating Reserve Centers.
 - Encourage building occupants to document their energy conservation efforts and share photos and videos.
 - Visit other Reserve Centers for a "show and tell" of energy conservation efforts.
- Install energy conservation displays at your Reserve Centers.
- Partner with your local utility providers, other sustainability agencies and other Department of the Army agencies (such as your Morale, Welfare,

Recreation entities; Army and Air Force Exchange Service; and Defense Commissary Agency) to host an energy conservation fair with activities for your entire community.

- Partner with Installation schools to host an energy conservation event by conducting science experiments to demonstrate energy concepts.

At your events:

- Share the Army and Army Reserve Energy Action Month Messages with your community.
- Talk tips on energy conservation and resilience.
- Demonstrate energy saving products such as light emitting diode (LED) or compact fluorescent light (CFL) bulbs; electrical outlet insulators and light switch insulators; furnace filter alarms; programmable thermostats; 'smart' power strips; watt meters; timers; and occupancy sensors.
- Take pictures and share them on social media. Be sure to tag @sustainableusar.



U.S. Army Garrison Fort Buchanan team educating the community as a part of the 2018 Energy Action Month campaign.

Download Energy Action Month posters, talking points, social media assets, digital billboards and more by visiting usar.army.mil/sustainability.

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Suggested Social Media Posts

- Be Twice the Citizen. Save energy in your Army Reserve Center. Save energy at home.
- The power is in your hands. When you purchase electronics and appliances, choose ENERGY STAR® certified models.
- Energy touches nearly every aspect of the Army Reserve's mission. Ensure our energy future, and conserve power.
- If you pay your income taxes, you pay the energy bill at your Army Reserve Center! Be a steward of our resources and conserve power.
- The Army Reserve Energy Program advances our mission, protects our communities and empowers our Soldiers to charge ahead. Do your part. Conserve energy.
- Conservation helps ensure our Soldiers have the energy they need, when and where they need it, to accomplish their missions—at home and down range, now and in the future.
- If you see energy waste in your Army Reserve facility, say something! Report incidences of waste and opportunities for energy conservation to your Facility Manager or Building Energy Monitor.
- Create a more energy efficient office. Use natural light wherever possible, and use the 'energy saver' modes on copiers and printers.
- If it's not in use, turn off the juice. Power down lights, electronics and appliances when they are not in use to conserve our resources, reduce our operating costs and enhance our energy security.
- When you're conserving energy, go with the flow. Change your heating and air conditioning system's filters regularly. Ensure your vents are not obstructed, and close doors and windows to heated or air conditioned areas.
- Did you know 35-40% of home energy use is spent on heating and cooling? Set your thermostat at 68 degrees in the fall/winter and 78 degrees in the spring/summer to conserve energy.
- Fall has arrived and winter is around the corner. Weatherizing your home to eliminate air leaks and adding insulation not only makes for a comfortable home, but a more efficient one, too! For tips, visit energystar.gov and search Weatherize.
- We have bright ideas for energy conservation. Replace your incandescent light bulbs with energy efficient compact fluorescent lights (CFLs) or light emitting diodes (LEDs).
- Looking to reduce your energy bill? Hire an energy professional or conduct a DIY Home Energy Audit. You might be surprised on the ways you can improve efficiency and create a more comfortable and affordable home.
- Did you know at least 50% of customers in most states have the option to purchase renewable electricity directly from their power supplier? Research your market and do your part to increase the development of renewable energy resources.

Suggested Hashtags

#Energy #USARGoGreen #EnergyActionMonth
#ThePowerIsInYourHands #EnergySmartArmyStrong
#EnergyResilienceEnablesArmyReadiness

Suggested Tags

@USArmyReserve (United States Army Reserve - Official)
@ArmyOEI (Army Office of Energy Initiatives)
@ENERGY (United States Department of Energy)
@SustainableUSAR (Army Reserve Sustainability Programs)

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[@SustainableUSAR](https://twitter.com/SustainableUSAR)



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Online Resources



Army Office of Energy

www.asaie.army.mil/Public/ES/oei/index.html
www.facebook.com/ArmyOEI/
@ArmyOEI

Energy Information Administration

www.eia.gov/
www.facebook.com/eiagov/
@EIAgov

Energy Saver

www.energy.gov/energysaver/energy-saver
www.facebook.com/energysavergov

Environmental Protection Agency

www.epa.gov/energy
www.facebook.com/EPA/
@EPA

United States Department of Energy

www.energy.gov/
www.facebook.com/energygov/
@ENERGY

Office of the Assistant Chief of Staff for Installation Management Online Portal

Access the **OCPA portal** using Internet Explorer. A CAC is required; select the Email Signature option.

Army and Air Force Exchange Services (AAFES)

www.shopmyexchange.com

Defense Commissary Agency (DeCA)

www.commissaries.com

No federal endorsement of non-Department of Defense websites, or the products and services on those websites, is intended. Resources are intended for informational purposes only.

Watch and share the
U.S. Army Energy: The Power to Win
video on YouTube.



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Contact Information



Army Reserve Energy and Water Team

For additional information about Army Reserve Energy and Water Programs:

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Tailored Communications

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Building Energy Monitor Training

For questions and information about Building Energy Monitor training:

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Energy Awards

To request Army Reserve Energy and Water Programs awards information:

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ARMY RESERVE SUSTAINABILITY PROGRAMS