DEPARTMENT OF THE ARMY
U.S. ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, U.S. ARMY GARRISON COMMAND, FORT KNOX
111 E CHAFFEE AVENUE
FORT KNOX, KENTUCKY 40121-5256

AMIM-KNP (1oo) 14 July 2023

MEMORANDUM FOR

Commanders, All Units Reporting Directly to This Headquarters
Commanders, Fort Knox Partners in Excellence
Directors and Chiefs, Staff Offices/Departments, This Headquarters

SUBJECT: Fort Knox Policy Memo No. 24 – Installation Energy Guidance 2023

1. References.

a. Energy Policy Act of 2005.

b. Energy Independence and Security Act of 2007.

c. Executive Order 13423 Strengthening Federal Environmental, Energy, and Transportation Management, 26 January 2007.

d. Executive Order 13514 Federal Leadership in Environmental, Energy, and Economic Performance, 8 October 2009.

e. Executive Order 13834 – Efficient Federal Operations, 17 May 2018 (revoking Executive Order 13693 – Planning for Federal Sustainability in the Next Decade, 19 March 2015).

f. Army Regulation (AR) 420-1, Army Facilities Management, 12 February 2008 (RAR 24 August 2012).

g. Army Energy Strategy for Installations, 8 July 2005.

2. Purpose. To emphasize energy saving measures, which can be controlled by Fort Knox Soldiers, Family members, employees, contractors, and all Department of Defense (DoD) and Non-DoD organizations, activities, agencies, tenants, and partners without decreasing comfort, safety, health and quality of life standards.

3. General. Department of the Army, Installation Management Command (IMCOM), Human Resource Center of Excellence and United States Army Garrison (USAG) Fort Knox guidance, supports the Energy Policy Act of 2005, the Energy Independence and Security Act of 2007, and Executive Orders 13423 and 13834. These documents emphasize responsibilities, including customer responsibilities, within the Energy

Management Program and set goals to be reached by all Department of Defense organizations. Executive Order (EO) 13834 affirming that agencies shall meet such statutory requirements in a manner that increases efficiency, optimizes performance, eliminates unnecessary use of resources, and protects the environment.

4. Policy/Procedures. Fort Knox has achieved yearly energy reduction goals set by the Energy Policy Act of 2005 or the Energy Independence and Security Act of 2007 **with respect to our facilities**. (See enclosure 4 for details.) The goal of this policy is to ensure the Fort Knox community is taking actions to comply with the laws and the EO mandate and developing procedures to track compliance. Wasteful habits can negatively impact the good results. Fort Knox targets 2.5% per year energy reduction, Fort Knox also targets reducing water consumption by 3% per year, utilize renewable energy and sustainable building practices, and target reducing petroleum use 2% per year. Efficient use of energy is and will remain a Command priority. Commanders and Directors are expected to implement effective energy program IAW AR 420-1, Chapter 22. Enclosed are some best management practices to help achieve energy reduction goals. Commanders and Directors will ensure that effective Organization Energy Conservation Officers (ECOs) are appointed. Organizations with a large number of facilities beyond the ECOs ability to observe shall also appoint Building Energy Monitors (BEMs) to ensure required area inspections are conducted in order to eliminate waste during both duty and non-duty hours. The Directorate of Public Works (DPW) and Installation Energy Manager will continue to assist units through energy conservation projects and educational initiatives. The Energy Office of the DPW will serve as lead on a quarterly Energy Council as well as monthly Energy Line-Item Reviews (LIR). The Energy Office will review Program effectiveness, identify innovative ways to conserve energy and water, and provide progress reports to this Command.

5. Responsibilities.

a. Commanders/Directors:

(1) Ensure that an ECO is appointed for all organizations. The ECO should be in a position of significance in the organization that has the authority to direct compliance with energy policies. ECO appointments will be made in writing to the DPW Energy Office within 30 days of issuance of this Policy Memo.

(2) Ensure that all ECOs/BEMs in their organization receive and utilize the energy checklists (Building Energy Monitor Checklist (enclosure 1-1) and the Office Energy Checklist (enclosure 1-2) and perform assigned duties. Report the name, phone and the building number of the ECOs and BEMs to the DPW Energy Office. Point of contact is Robert (RJ) Dyrdek, Energy Program Manager at (502) 624-2604.

(3) Ensure that all ECOs attend monthly meetings arranged by the installation Energy Manager. These occur the 2nd Thursday of every month and are located in Building #1110, Room 332. This is the Directorate of Public Works (DPW) Conference Room.

(4) Procure and use only ENERGY STAR™ rated office equipment. ENERGY STAR™ compliance is mandated by the Energy Policy Act of 2005 (EPA 2005), Energy Independence and Security Act of 2007 (EISA 2007), and AR 420-1. ENERGY STAR™ rated equipment has a sleep mode that reduces energy consumption when not in use. Ensure the equipment is programmed to enter sleep mode although it still draws energy while asleep. Place all peripheral devices in an office/area/workstation on the minimum number of power strips/surge protectors, which have timers or motion sensors to shut down all peripherals when the areas are unoccupied (see enclosure 2).

(5) Computers and Monitors: Personal computers (PCs) may be left on, but logged off, at the end of the day as directed by the Network Enterprise Center (NEC). NEC is utilizing software that will remotely shut PCs down after 20 minutes of inactivity. Monitors and peripheral devices (monitors, scanners, speakers, chargers, etc.) will be turned off at close of business every day and at any time when not in use (AR 420-1, Chapter 22). Use the power strips/surge protectors with timers or motion sensors to shut them down completely.

(6) AR 25-1, paragraph 6-2f requires that all purchases of microcomputers, including personal computers, monitors and printers, meet the ENERGY STAR™ requirements for energy efficiency. Scanners, copy machines, faxes, printers and other such equipment should be programmed with sleep modes to activate automatically when not in use. All of this equipment is required to be ENERGY STAR™ rated (see enclosure 2).

(7) Classrooms and Conference Rooms: Ensure all unnecessary equipment (Smart boards, TVs, LCD projectors, etc.) is turned off. Flat screen TVs (Plasma/LCD) and classroom/conference room electronics use more electricity and generate more heat, increasing air conditioning load, than earlier versions of these rooms. Electronics on "standby" mode continue to consume energy; shut them down when not needed.

(8) Eliminate off-hour and exterior lighting unless necessary for safety and security (AR 190-11) and turn off lights in offices and common areas during off-duty hours. Until occupancy sensors are installed, have procedures in place to ensure lights and equipment get turned off. Install light switches if circuit breakers are currently the only way to turn off lights.

(9) Ban the bulb!!! Install LED lighting in place of compact fluorescents and incandescent lighting.

(10) Reduce water consumption inside and outside of buildings.

(11) The use of personal refrigerators is not authorized for individual work areas and strongly discouraged. Refrigerators are authorized in work and office areas for area use with sizing based on number of personnel supported. Use one cubic foot per person as an average to determine size and quantity of refrigerators that are appropriate. Refrigerators in work areas and offices intended for only one person's use are prohibited. Exceptions allowed for general officers and commanders who have conference room meeting requirements that justify the single use (reference: AR 420-1, Chapter 22-12).

(12) Stop idling government vehicles when unattended or waiting for more than 30 seconds. Monitor the administrative use of vehicles and other energy consuming equipment for unnecessary use.

(13) Monitor the use and authorization of personal space heaters. Per Army Regulations, space heaters are not authorized for use, unless approved by Garrison, DPW, and Fire Department, with supervisor/medical approval. Space heaters are energy hogs and can be dangerous if not used properly. An approved space heater must be UL or FM approved, contain a tip over switch, and not be set on or near combustible materials. If use of a space heater is approved, electrical extension cords will not be used. If the facility heating system is not adequate, contact the Directorate of Public Works (DPW) at (502) 624-1171 for repairs/modifications.

(14) Doors and windows between conditioned spaces and non-conditioned spaces are not to be propped or left open. Active management of doors and windows that control conditioned spaces is critical to reducing energy waste.

(15) Use setback temperatures on all heating, ventilation and air conditioning equipment, including window air conditioners that are being used for temporary solutions. If automated controls are not installed, activate procedures for manual adjustment of all heating and cooling equipment at the end of every workday and for any periods an area is unoccupied during work hours (locker rooms, lunch/break rooms). Required setback temperatures are found in AR 420-1, Chapter 22 as follows:

Occupied Settings	Unoccupied Settings
Heating at 72 °F +/- 2 °F	55 °F +/- 5 °F
Cooling at 74 °F +/- 2 °F	85 °F +/- 5 °F

Patton Museum (recognized by the Center of Military History) should maintain heating and cooling (and humidity settings) IAW AR 870-20.

(16) Ensure that contract clauses cover the guidelines of this energy policy. Contractors may also suggest energy conservation opportunities.

(17) Encourage, recognize, share and reward worthwhile ideas on energy and water conservation.

(18) Do not "charge" government electric vehicles (GOV) between 1100 and 1630 during the months of May through September. As well as from 0600 to 1000 during the months of October through April.

b. Director of Public Works:

(1) When replacing lighting, use only the LED lights or more energy efficient lighting. Install daylight, motion sensors or timers to automatically shut off lights when cost effective. In general, see the Energy Office DPW Energy Standards for details.

(2) Replace all "bulb" EXIT lighting with LED or electroluminescent lighting fixtures as funding supports or through attrition/failure of existing bulbs and fixtures.

(3) During the heating season, maintain temperatures in occupied general office space to 72 °F (plus or minus 2 °F) during working hours. Set heaters to decrease to 55 °F (plus or minus 5 °F) during unoccupied hours (see enclosure 3).

(4) Ensure cooling devices are set to 74 °F (plus or minus 2 °F) during working hours. At night or other times where buildings are unoccupied, temperatures should be 85 °F (plus or minus 5 °F). Exceptions are granted if DoD standards require otherwise (i.e., medical reasons, or if necessary to prevent mold, during periods of high humidity, etc.) (see enclosure 3).

(5) Maintain hot water supply temperatures as follows:

(a) Automatic dishwashing in food services facilities 140 °F.

(b) Final rinse for dishes and utensils in all food service applications 180 °F.

(c) Child Care Centers IAW AR 608-10 for child occupied areas.

(d) Administrative and other facilities 110 °F.

(6) Ensure all Sustainment Restoration and Modernization (SRM) and Military Construction (MILCON) projects fully comply with prescriptive technology solution sets in IMCOM/Engineer Research and Development Center (ERDC), Construction Engineering Research Laboratory (CERL), and Energy and Water Conservation Design Guide. The SRM Design Guide specifies that all SRM funded projects as well as MILCON construction shall comply with and contribute towards the goals specified in EPA 2005, EISA 2007, EO 13423, EO 13514, EO 13834, and LEED where applicable to these guidelines.

(7) Ensure compliance with AR 420-1, Appendix H-16, specifications that all new Army facilities must achieve the Leadership in Energy and Environmental Design (LEED) SILVER rating criteria for sustainable design where applicable to these guidelines.

(8) Replace all motors and pumps with only high-efficiency ENERGY STAR™ compliant equipment every time a replacement is required. Prohibit staff from rewinding or replacing with the same efficiency. Replacement with high efficiency normally has a payback of less than 5 years and / or as revealed and implemented in the most current Energy Savings Performance Contract (ESPC) metrics instituted as a part of Task Order (TO) W912DY-15-D-0042-0001.

(9) All motors and pumps that have automatic controls will be operated in "auto mode" and not in manual mode that causes them to run 24/7, unless specific systems require 24/7 operation. Conduct internal control review of the requirements to reduce operating hours of pumps and motors and / or as revealed and implemented in the most current ESPC metrics instituted as a part of TO W912DY-15-D-0042-0001.

(10) Meter, measure, and track energy and water consumption by building and activity. Analyze use for targeted conservation efforts.

(11) Lease/procure only fuel-efficient vehicles.

(12) Reduce petroleum use by 2% per year.

c. Installation Energy Manager:

(1) Train all ECOs/BEMs.

(2) Provide expertise and support to ECOs and BEMs and others assigned energy and water conservation responsibilities.

(3) Maintain and update all garrison plans, follow or set the best management practices and standard operating procedures pertaining to energy and water conservation.

(4) Visit facilities and conduct quality assurance energy and water conservation inspections as necessary.

(5) Act as the proponent for energy and water conservation projects on the installation.

(6) Monitor consumption of energy and water.

(7) Conduct public outreach activities to raise awareness of energy and water conservation throughout the community.

(8) Complete yearly and upward reporting for energy and water savings and usage.

(9) Act as the proponent for energy awards for the community.

d. Director of Plans, Training, Mobilization and Security:

(1) Update appropriate Staff Duty Officer (SDO) and Field Officer of the Day (FOD) instructions to incorporate review of unit/directorate/building compliance with this directive.

(2) FOD checklist will include review of sample facilities compliance during duty days.

(3) SDO instructions and checklists will include review of energy savings directives detailed in this directive. SDO will perform non-duty hour checks of building exterior and interior illumination, parking lot lights, and recreation fields.

e. All tenant, DoD, Non-DoD, contract and partner organizations: Energy consumption by all organizations contributes to the overall "load" for the Fort Knox installation. Directors/Commanders efforts have a direct effect on setting the peaks that affect the utility rates charged to Fort Knox by the commodity suppliers. Energy awareness and reduction efforts directed above apply to all agencies as well.

6. Proponent. The agency responsible for this policy is the U.S. Army Garrison Fort Knox, Directorate of Public Works, at (502) 624-2151/7351. For further information, contact the Installation Energy Manager at (502) 624-2604.

4 Encls
as

CHRISTOPHER J. RICCI
COL, IN
Commanding