



***U.S. Department of Health and Human Services  
Sustainability Report and Implementation Plan***

**U.S. Department of Health and Human Services  
2018 Sustainability Report and Implementation Plan**

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# U.S. Department of Health and Human Services 2018 Sustainability Report and Implementation Plan

## **Executive Summary**

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The U.S. Department of Health and Human Services (HHS) Sustainability Program, led by the HHS Chief Sustainability Officer (CSO), is committed to continuing engagement of the HHS community to promote a culture of quality improvement and to lead the advancement of human health, environmental stewardship, and sustainability through partnership and innovation. HHS uses an interdisciplinary, collaborative approach to sustainability with all employees, contract personnel, and the private sector, to develop and implement sustainability endeavors connected with the following goal areas:

- Design, build and maintain sustainable buildings, facilities and infrastructure
- Improve energy efficiency
- Reduce greenhouse gas (GHG) emissions
- Leverage clean and renewable energy
- Increase water conservation
- Improve fleet and vehicle efficiency and management
- Purchase sustainable products and services
- Minimize waste and prevent pollution
- Implement performance contracts for federal buildings and
- Manage electronic equipment and data centers responsibly.

The HHS Sustainability Program achieves sustainability goal area targets with the help of appointed goal managers across the agency and within the HHS Operating Divisions (OpDivs). Goal managers coordinate initiatives related to sustainability in specific goal areas. They serve as champions for sustainability to promote widespread adoption of sustainable practices throughout the agency.

HHS has incorporated the fundamentals of sustainability into the daily operations of campuses and facilities as can be seen by the fact that the HHS greenhouse gas emissions have been reduced by 36.2 percent in fiscal year 2017 as compared to FY 2008.

The HHS Sustainability Report and Implementation Plan details the strategies and actions that will enable HHS to achieve additional sustainability improvements and cost savings. Specific emphasis will be placed on energy and water efficiency improvements using performance contracting funding vehicles, the installation of on-site renewable energy projects, high-performance building designs for new construction and renovations, implementation of sustainability laboratories practices, and continued integration of sustainability acquisitions.

## **Implementation Summary**

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### **1. Facility Management:**

#### **FACILITY ENERGY EFFICIENCY**

FY 2017 Status: 32 percent reduction on energy intensity basis as compared to a FY 2003 baseline

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<b>Implementation Status</b>	<b>Operational Context</b>	<b>Priority Strategies and Planned Actions</b>
<p>HHS OpDivs have focused efforts on making energy efficiency investments in agency buildings, installing and monitoring energy meters/submeters, tracking monthly energy data (often using Portfolio Manager), and using this data to improve energy management and performance.</p> <p>In addition, new designs and renovations incorporate the 2016 Guiding Principles for increased efficiency.</p> <p>These strategies have resulted in an overall reduction of 32 percent in energy use intensity from the 2003 baseline.</p> <p>In FY 2018, the Indian Health Service (IHS) facilities maintenance and improvement budget was provided \$91.8 million in additional funding to reduce the backlog of essential maintenance and repair (BEMAR) at IHS-supported healthcare facilities. Much of those funds are being used to replace aged heating and cooling systems with more efficient equipment and methods.</p> <p>At the National Institutes of Health (NIH) Research Triangle Park (RTP), the agency’s first net-zero warehouse came on line. NIH is still waiting on the final U.S. Green Buildings Council review to determine whether the project will be awarded a Leadership in Energy and Environmental Design (LEED) rating of Gold or Platinum.</p>	<p>HHS facilities are predominately energy intensive laboratories with operating requirements that include 24/7 operations, 100 percent outdoor air, and a high frequency of air changes. These operating constraints pose a challenge to meeting energy reduction requirements.</p> <p>Additionally, mission changes and new construction or renovations to meet current laboratory and research requirements increase the challenge to obtain significant reductions.</p> <p>HHS facility managers continuously assess new efficiency projects for all buildings where life-cycle cost effective.</p>	<p>Over the next two fiscal years, HHS projects an annual 1.5% decrease in energy intensity, from the previous year.</p> <p>HHS will continue to maximize the use of cost-effective performance contracting to implement energy efficiency measures and achieve energy reductions.</p> <p>Incorporating energy efficiency into all construction projects, both for new construction and for renovations, will continue to be a priority.</p> <ul style="list-style-type: none"> <li>• HHS OpDivs will focus on implementing existing performance contract task orders and awarding new task orders in FY 2018 and beyond.</li> <li>• In FY 2018 and 2019, Food and Drug Administration (FDA) Jefferson Laboratories Complex (JLC) will continue installation of a direct digital continuous commissioning system that will map all points on campus and allow the metering of individual equipment to calculate how much energy is being consumed.</li> <li>• FDA is incorporating LEED and Green Building Design Principles in the design of the JLC \$30 million renovation to Building 14 and 53A and the new replacement lab building for the Winchester Engineering and Analytical Center (WEAC).</li> <li>• IHS will prioritize maintaining healthcare accreditation, completing energy evaluations, and upgrading and constructing new facilities that meet the 2016 Guiding Principles.</li> <li>• NIH is currently renovating the E Wing of Building 10 that will substantially reduce the current building energy use (approximately 217,000 GSF (gross square feet)).</li> </ul>

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**EFFICIENCY MEASURES, INVESTMENT, AND PERFORMANCE CONTRACTING**

Energy Savings Performance Contract (ESPC) and Utility Energy Services Contract (UESC) investment / number of projects FY 2017: \$5.6 million / 1

<i>Implementation Status</i>	<i>Operational Context</i>	<i>Priority Strategies and Planned Actions</i>
<p>HHS utilizes performance contracting to meet energy efficiency and management goals.. Life-cycle cost effective energy, clean energy technology and water conservation measures are implemented via these contracts.</p> <p>HHS Performance Contracts:</p> <ul style="list-style-type: none"> <li>• FY 2016, Centers for Disease Control and Prevention (CDC) awarded an Energy Savings Performance Contract at National Institute for Occupational Safety and Health in Pittsburgh, PA for \$14.5 million with annual energy savings of 58,183 million British thermal units per year (MMBtu/yr).</li> <li>• FY 2016, CDC awarded a Utility Energy Services Contract at the Roybal, Chamblee, and Lawrenceville campuses in Georgia, for \$5.6 million with annual energy savings of 19,205 MMBtu/yr.</li> <li>• FY 2017, FDA completed the Irvine, CA \$4 million UESC with annual energy savings of 8,631 MMBtu/yr.</li> <li>• FY 2017, FDA implemented the Muirkirk Road Complex (MRC) \$2.4 million UESC Phase 7 ECMs with annual energy savings of 15,669 MMBtu/yr.</li> <li>• FY 2017, FDA awarded the MRC \$3.1 million UESC Phase 8 with an annual energy savings of \$141k/yr.</li> <li>• FY 2017, IHS awarded a \$6 million UESC at the Phoenix Indian Medical Center.</li> <li>• FY 2016, NIH completed two large ESPCs (over \$30 million) covering all NIH local and remote sites.</li> <li>• FY 2017, NIH completed a UESC and continued construction of a second UESC (together over \$20 million)</li> </ul>	<p>HHS continues to analyze opportunities for performance contracting to implement energy and water efficiency and renewable energy projects. Performance contracts are also used to complete EISA covered facility evaluations to the greatest extent possible. Performance contracting training is completed by new staff prior to launching new contracts.</p>	<p>For FY 2018, HHS is planning the award of three projects valued at \$25.9 million. In FY 2019, HHS projects the award of two contracts valued at \$10.8 million.</p> <ul style="list-style-type: none"> <li>• FY 2018, CDC will award Phase 2 of a UESC for GA campuses at \$9 million.</li> <li>• FY 2018, FDA will buy-down \$1.9 million toward existing performance contract.</li> <li>• FY 2019, FDA will buy-down \$1 million in existing performance contract obligations.</li> <li>• FY 2018, NIH is planning on awarding a \$15 million performance contract for a multi-building lighting and water conservation project.</li> <li>• FY 2019, NIH is planning on awarding a \$6.5 million performance contract for a thermal bridge project to serve approximately 20 buildings on the NIH Bethesda Campus.</li> <li>• FY 2020, NIH anticipates awarding a \$2.5 million performance contract for lighting and water conservation projects.</li> <li>• Program Support Center (PSC) 5600 Fishers Lane facility continues to</li> </ul>

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<p>covering multiple facilities on the Bethesda campus.</p> <ul style="list-style-type: none"> <li>• FY 2017, NIH completed a UESC for repair of economizers at the Bethesda Central Utility Plant (CUP).</li> </ul>		<p>analyze a solar rooftop project.</p> <ul style="list-style-type: none"> <li>• HHS will analyze clean energy technologies in all investment grade audits.</li> </ul>
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**RENEWABLE ENERGY**

FY 2017 Status: 21.8 percent renewable electricity

<i>Implementation Status</i>	<i>Operational Context</i>	<i>Priority Strategies and Planned Actions</i>
<p>HHS will focus renewable energy strategies on the implementation of on-site generation projects. Where necessary, HHS OpDivs will purchase RECs to meet the minimum 7.5 percent renewable electricity requirement.</p> <p>Potential renewable energy projects will be identified through energy evaluations and implemented using performance contracting.</p> <ul style="list-style-type: none"> <li>• FY 2017, CDC installed three solar photovoltaic (PV) array ECMs totaling 2-megawatts (MW) as part of performance contracts.</li> <li>• FY 2017, FDA installed a 1.3 MW PV system at Irvine as part of a UESC.</li> </ul>	<p>HHS has exceeded the mandated percentage of renewable energy by purchasing renewable energy credits (RECs) above requirements and is aggressively pursuing on-site solar renewable energy where feasible.</p>	<p>In FY 2018 and FY 2019, HHS electricity usage will be met by 10% renewable energy sources.</p> <ul style="list-style-type: none"> <li>• FY 2018, CDC will complete a 2.5 MW ground-mount solar PV array as part of a UESC.</li> <li>• FY 2018/19, CDC is pursuing an on-site fuel cell project for a new facility in Lawrenceville, Georgia.</li> <li>• FY 2018, IHS will implement an on-site solar project at the Phoenix Indian Health Center as part of a UESC.</li> <li>• FY 2018, IHS will complete a 496 MW PV array at the new Ft. Yuma Healthcare Center in California.</li> </ul>

**WATER EFFICIENCY**

FY 2017 Status: 1 percent increase in potable water intensity as compared to FY 2007

<i>Implementation Status</i>	<i>Operational Context</i>	<i>Priority Strategies and Planned Actions</i>
<p>HHS continues the implementation of performance contracts and direct funded water conservation measures (WCMs) for water metering, steam traps, condensate units, and low flow fixtures to conserve water.</p>	<p>HHS has a large amount of laboratory and vivarium space, which are water-intensive facilities. In addition, much of the research performed requires water in the research procedures. It is not uncommon for facilities to change the type of research or analytical testing performed, or</p>	<p>In FY 2018, HHS is projecting a 2.8% decrease in potable water intensity from the previous year, and a 1.2% decrease in FY 2019.</p> <ul style="list-style-type: none"> <li>• FY 2019, CDC will complete a condensate recovery WCM as part of</li> </ul>

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<p>New construction and renovation projects include water efficiency measures such as plumbing fixtures; heating, ventilating and air-conditioning (HVAC) systems; lab systems; and infrastructure or storm water uses to the greatest extent possible.</p> <ul style="list-style-type: none"> <li>• FY 2017, CDC used the building automation system (BAS) and WaterSignal systems to monitor water use real time and resolve multiple high-use alerts, saving significant amounts of water.</li> <li>• FY 2017, CDC completed a well water UESC WCM for cooling tower and boiler make-up.</li> <li>• FY 2017, CDC completed a stream replacement project, eliminating substantial maintenance associated with water usage.</li> </ul>	<p>the frequency of performance, which would, in turn, change the amount of water used in that facility.</p> <p>Closed-loop process water systems are used to the greatest extent possible at HHS facilities. All once-through or open loop systems have been converted to closed-loop wherever possible. Current focus is to ensure closed-loop systems are part of all new designs and major renovations.</p> <p>Where it is economical, facilities are considering storm water catchment, retention of cooling water tower blowdown and other means to provide for irrigation water.</p>	<p>the UESC Phase 2 at the Roybal campus interconnecting all lab buildings to the CUPs cooling towers.</p> <ul style="list-style-type: none"> <li>• FY 2018, CDC plans to expand WaterSignal services with a new contract to include monitoring of the existing water meters at the Fort Collins campus.</li> <li>• FY 2019, NIH will complete a UESC WCM for RTP to use grey water from a nearby municipal waste water treatment plant for make-up water in cooling towers.</li> <li>• FY 2018, IHS implemented a strategy at the Ft. Yuma Healthcare Center to treat and use the cooling tower blowdown water for all landscape irrigation eliminating the use of potable water for irrigation.</li> </ul>
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**HIGH PERFORMANCE SUSTAINABLE BUILDINGS**

FY 2017 Status: 4 percent buildings and 8 percent gross square foot (GSF)

<i>Implementation Status</i>	<i>Operational Context</i>	<i>Priority Strategies and Planned Actions</i>
<p>HHS new designs and renovations incorporate the 2016 Guiding Principles and LEED standards to the greatest extent possible.</p> <p>Additionally, HHS operations management incorporates the fundamentals of sustainability into daily operations of campuses and facilities.</p> <ul style="list-style-type: none"> <li>• CDC developed and employs the Fitwel healthy building certification program at their facilities.</li> <li>• CDC Lawrenceville Lab Bldg. B installed PV arrays in May/June 2018 to achieve Net Zero Energy.</li> <li>• FDA JLC \$30 million renovation to Building 14 and 53A and the new WEAC 75,000 sf laboratory upon completion will receive LEED Silver certified.</li> </ul>	<p>HHS strives to achieve high-performance building standards in offices and administration buildings and in the energy and water intensive laboratories, hospitals, and health centers throughout HHS.</p> <p>Agency and OpDiv design guidelines</p>	<p>HHS projects increasing the GSF of sustainable buildings by 1% for each of the next two years.</p> <ul style="list-style-type: none"> <li>• CDC will evaluate one existing building per fiscal year for Fitwel certification.</li> <li>• FDA will continue the JLC renovation and the WEAC replacement lab design,</li> </ul>

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<ul style="list-style-type: none"> <li>• IHS Kayenta Center and Desert Sage Youth Center are LEED Gold certified facilities. Upon completion, Fort Yuma will achieve LEED Gold certified. The Cass Lake Hospital has met the 2016 Guiding Principles energy efficiency standard.</li> <li>• NIH completed construction of a Net Zero Energy (NZE) warehouse. The first HHS NZE building.</li> <li>• PSC 5600 Fishers Lane is a LEED Platinum certified building and received the Energy Star rating of 99.</li> </ul>	<p>outline the use of the 2016 Guiding Principles and LEED standards to maximize building efficiency.</p>	<p>incorporating LEED and Green Building Design Principles.</p> <ul style="list-style-type: none"> <li>• FY 2021, IHS will add new buildings to the Guiding Principles inventory.</li> <li>• NIH will continue to identify and implement performance contracting ECMs to promote green buildings.</li> </ul>
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**WASTE MANAGEMENT AND DIVERSION**

FY 2017 Status: 72 percent waste diverted and 69 percent Construction and Demolition (C&D) waste diverted

<i>Implementation Status</i>	<i>Operational Context</i>	<i>Priority Strategies and Planned Actions</i>
<p>HHS facilities focus on purchasing, recycling, and waste reduction strategies. Efforts to find further avenues of waste reduction continue at all levels. Education, outreach, and engagement of staff remain a priority. The following specific strategies are applied in HHS facilities:</p> <ul style="list-style-type: none"> <li>• Extensive outreach efforts to lab staffs, construction managers, and operational managers</li> <li>• Targeted effort to maximize recycling and minimize waste in laboratories</li> <li>• Efforts to replace hazardous chemicals with safer substitutes, and eliminate or reduce refrigerants.</li> </ul>	<p>HHS facilities and campuses consist of diverse laboratories with large requirements of supplies, chemicals, and equipment. Therefore, both non-hazardous and hazardous waste streams are diverse, requiring targeted efforts to minimize.</p>	<p>HHS will work to increase diverted waste to 74% and C&amp;D waste to 70% by FY 2019.</p> <ul style="list-style-type: none"> <li>• OpDivs collect and redistribute gently used office supplies to the greatest extent possible.</li> <li>• FDA is working to develop a Styrofoam recycling process due to the large volumes of Styrofoam packing materials that are received.</li> <li>• CDC, FDA, and NIH have established sustainable laboratory Green teams that address issues, including waste prevention in laboratories.</li> <li>• HHS OpDivs continue to complete environmental audits as part of environmental management system (EMS) programs that identify waste prevention measures.</li> <li>• FY 2018, IHS implemented a material diversion goal within the Ft. Yuma Healthcare Center project that resulted in roughly 91 percent of construction waste diverted from landfills.</li> </ul>

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**2. Fleet Management:**

**TRANSPORTATION / FLEET MANAGEMENT**

FY 2017 Status: 30 percent reduction in petroleum and 268 percent increase in alternative fuel since FY 2005

<i>Implementation Status</i>	<i>Operational Context</i>	<i>Priority Strategies and Planned Actions</i>
<p>HHS uses a Fleet Management Information System (FMIS) to track real-time fuel consumption throughout the year for agency-owned, General Services Administration (GSA)-leased, and commercially-leased vehicles.</p> <p>HHS will continue to optimize and right-size fleet composition, by reducing vehicle size, eliminating underutilized vehicles, and acquiring and locating vehicles to match local fuel infrastructure.</p> <p>HHS will continue to collect and utilize agency fleet operational data through deployment of vehicle telematics.</p>	<p>HHS has both domestic and international fleet vehicles. Most of the HHS fleet vehicles are leased from the GSA.</p> <p>HHS continuously mitigates fleet size and cost, by replacing conventional fuel vehicles with more fuel-efficient vehicles (i.e. hybrids and electric).</p> <p>Health-related emergencies create mission priorities that cause significant fluctuations in fleet use and GHG emissions.</p>	<p>Through FY 2019, HHS projects an additional 5% per year reduction in petroleum use and a 2% per year increase in alternative fuel use.</p> <ul style="list-style-type: none"> <li>• Replace conventional gasoline fleet vehicles with hybrids, alternative fuel, and electric vehicles.</li> <li>• FY 2019, install telematics on seven light duty and medium duty vehicles.</li> <li>• FY 2019/2020, install telematics on 30 vehicles at three locations.</li> </ul>

**3. Cross-Cutting:**

**SUSTAINABLE ACQUISITION / PROCUREMENT**

FY 2017 Status: 5.6 percent contracts and 4.6 percent contract dollars with environmental clauses

<i>Implementation Status</i>	<i>Operational Context</i>	<i>Priority Strategies and Planned Actions</i>
<p>HHS follows the policies and strategies outlined in the Federal Acquisition Regulation to meet statutory mandates requiring purchasing preference for recycled content products, Energy Star qualified and Federal Energy Management Program (FEMP)-designated products, and bio-</p>	<p>HHS will adhere to all applicable Federal Acquisition Regulation (FAR) sustainability clauses in construction and other relevant service contracts.</p> <p>HHS provided the acquisition workforce</p>	<p>For both FY 2018 and FY 2019, HHS projects an increase of 18 contracts and a value of \$300,000 with environmental clauses.</p> <ul style="list-style-type: none"> <li>• CDC is working on cost-effective ways to capture purchase card information and working on new training for purchase card holders.</li> </ul>

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<p>preferred and bio-based products designated by the U.S. Department of Agriculture (USDA).</p> <p>For example:</p> <ul style="list-style-type: none"> <li>• Category Management Initiatives and governmentwide acquisition vehicles are incorporated into standard procurement processes.</li> <li>• Modify standard contract checklists to include applicable Product Service Codes (PSC) for green purchases and the reporting of bio-based and bio-preferred in the contract documentation.</li> <li>• Require mandatory training annually on sustainable purchasing requirements and applicable procurement procedures.</li> <li>• Review and update reporting mechanisms to capture all sustainable acquisitions.</li> </ul>	<p>with sustainable acquisition training, focusing on biobased products, further supporting the inclusion of sustainability requirements in applicable contracts.</p> <p>HHS OpDivs in turn detail procedures for their procurement staff.</p>	<ul style="list-style-type: none"> <li>• CDC will use an internal procurement staff portal to disseminate information and updates, particularly in regards to the use of PSCs for biobased purchasing.</li> <li>• IHS will mandate that any new Contract Specialists and Contracting Officer’s Representatives to complete the Defense Acquisition University (DAU) Online Training Course (CLC-046, Sustainable Procurement Program) within six months after hire date. Also, any newly hired Contracting Officer, who has not completed this training, will also have six months after hire date to complete.</li> <li>• NIH will require all new Ultra-Low Temperature (ULT) freezers purchased at NIH must be Energy Star Certified.</li> <li>• The Centers for Medicare and Medicaid Services (CMS) will continue to look for opportunities through market research that meet both category management initiatives and sustainable acquisition goals.</li> </ul>
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**ELECTRONICS STEWARDSHIP**

FY 2017 Status: 99 percent equipment acquisition meeting Electronic Product Environmental Assessment Tool (EPEAT) requirements, 99 percent equipment with power management, and 100 percent compliance with disposal guidelines

<b><i>Implementation Status</i></b>	<b><i>Operational Context</i></b>	<b><i>Priority Strategies &amp; Planned Actions</i></b>
<p>100 percent of HHS-disposed electronics were processed using environmentally sound methods, including GSA Xcess, Computers for Learning, Unicor, U.S. Postal Service Blue Earth Recycling Program, or Certified Recycler (R2 or E-Stewards).</p> <p>HHS-used governmentwide strategic sourcing vehicles to ensure</p>	<p>HHS Information Technology Services Office (ITSO) maintains power management on all standard computing devices via automated desktop management software, and all power settings are</p>	<p>Over the next two fiscal years, HHS projects to meet 100% compliance on electronic stewardship requirements.</p> <p>HHS plans to increase awareness of Electronic Product Environmental Assessment Tool purchasing and maintain acquisition and end-of-life compliance.</p>

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<p>procurement of equipment that meets sustainable electronics criteria.</p> <p>HHS continues to improve tracking and reporting systems for electronics stewardship requirements through the lifecycle: acquisition and procurement, operations and maintenance, and end-of-life management.</p> <p>HHS continues to enable and maintain power management on all eligible electronics; measure and report compliance.</p> <p>From 2011 to 2016, NIH has closed 54 of its 108 data centers: 9 of 42 (21 percent) of Tiered data centers and 45 of 66 (68 percent) of non-Tiered data centers. NIH closed six data centers in FY 2017 and plans to close an additional 15 data centers by FY 2020.</p>	<p>centrally managed and enforced on workstations.</p> <p>HHS utilizes a GSA-approved disposition vendor for the disposal of all information technology (IT) equipment.</p> <p>CDC ITSO designed, developed and implemented their Asset Management Tracking System (AMT) to track and report on all IT equipment throughout its lifecycle.</p>	<p>HHS will continue to work with HHS Acquisitions communities to ensure procurement of equipment that meets sustainable electronics criteria.</p> <p>NIH plans to start an education campaign to help Intermural, Extramural and Administrative organizations better understand how cloud computing can support their missions.</p> <p>The Data Center Optimization Initiative (DCOI) requires that a Data Center Energy Practitioner (DCEP) be assigned to each Tiered Data center. NIH plans to recruit, train and assign a DCEP to each Tiered data center.</p> <p>The NIH data center owners and cloud contract holders will identify cost-saving opportunities. NIH plans to consolidate data centers that no longer adequately support the mission.</p>
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**GREENHOUSE GAS EMISSIONS**

FY 2017 Status: 36.2 percent reduction in Scope 1 and 2 emissions

<i>Implementation Status</i>	<i>Operational Context</i>	<i>Priority Strategies and Planned Actions</i>
<p>HHS uses the U.S. Department of Energy FEMP GHG emission report to identify/target high emission categories and implement specific actions to address the identified high emission areas.</p> <p>Therefore, most Scope 1 and 2 efforts are targeted at energy use reduction and improving efficiency of building and laboratory operations.</p> <p>The majority of Scope 3 reduction efforts are currently focused on promoting green commuting habits for employees. The increased use</p>	<p>HHS headquarters and the OpDivs have dedicated sustainability teams that continue to focus on the reduction of GHG emissions.</p> <p>Specific workgroups meet to discuss sustainability efforts and initiatives for energy and water efficiency, high performance buildings, fleet management, sustainable acquisition, and employee outreach.</p>	<ul style="list-style-type: none"> <li>• HHS OpDivs will continue to use performance contracting as described above to implement ECMs and major campus energy improvements.</li> <li>• On-site renewable energy projects will continue to be implemented and new projects will be analyzed for HHS facilities as described above.</li> <li>• Laboratory sustainability and plug loads are a growing emphasis for HHS facilities. Significant research and procedures are being completed, to improve the efficiency of laboratory equipment use such as</li> </ul>

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<p>of public transportation, car and van pools, and teleworking are emphasized.</p> <p>Significant energy reductions have been achieved through energy conservation measures (ECMs) implemented by performance contracting. HHS-funded projects achieving energy reductions include building controls upgrades, HVAC equipment upgrades, and lighting projects. The continued practice of the promotion of telework, transit subsidies, enhanced access to public transportation, and employee outreach have contributed to Scope 3 GHG reductions.</p>	<p>HHS will continue to incorporate sustainable practices into mission-related initiatives with the goal of reducing GHG emissions to minimize the adverse effect on the environment and human health.</p>	<p>ULT freezers. HHS facilities personnel are working closely with scientists to determine more sustainable laboratory operations.</p> <ul style="list-style-type: none"> <li>• Facilities and campus master plans continue to be updated to address long-term energy capacity, security, climate resiliency and efficiency issues with an emphasis on efficiency and sustainability.</li> <li>• FY 2018, the newly completed IHS Ft. Yuma Healthcare Center as designed has reduced GHG emissions by 51% compared to median properties of similar use and type in when compared with Energy Star Portfolio Manager metrics.</li> </ul>
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**4. Agency Identified Priorities:**

Enduring, resilient facilities and operations are critical to support HHS as it ensures preparedness, safety and security of staff, and agility to fulfill the HHS mission. Therefore, resiliency planning will also be a part of the HHS facility master plans and sustainability priorities. CDC’s 2025 target is for one existing building to be energy net zero. IHS is planning to develop new chapter(s) for the IHS Architectural and Engineering Design Guide to include climate change resilience. The plan is to join a workgroup that will include representatives from the National Institute of Building Sciences, National Aeronautics and Space Administration, GSA, and Harvard University.

As a part of a center committed to the health of the American people, the CDC Sustainability Office will continue to promote health and wellness as a part of a sustainable lifestyle. The Office will pursue this through partnerships with Atlanta-area initiatives as well as design and health leadership nationally. Some notable projects in FY 2018 that promote the awareness of the health and built environment connection include the CDC partnership with the Atlanta Better Buildings Challenge, the CDC Sustainability and Health Webinar Series, and Fitwel certification. In a commitment to health for the CDC employees and reducing absenteeism rates, CDC has committed to the Fitwel certification of one existing building per quarter for applicable facilities. All planned new construction facilities will also be Fitwel certified.

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**Notable Projects and Highlights**

The HHS Green Champions Awards program recognizes the exceptional performance of HHS energy management personnel in implementing projects, programs, and alternative financing contracts to meet the requirements of the Energy Policy Act of 2005 (EPACT 05), the Energy Independence and Security Act of 2007 (EISA 2007), and current executive orders. In FY 2017, 130 employees received awards in the three awards categories.

HHS won two 2018 Federal Energy Management Program Energy and Water Management Awards. The first was in the Lab and Data Center Award category for the CDC and NIH team that implemented

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programs to manage ultra-low temperature freezers — one of the most energy-intensive pieces of laboratory equipment — to increase equipment reliability and reduce waste and energy costs.

Strategies included retiring freezers that were no longer needed, tuning freezer temperature, and performing regular preventative maintenance to conserve resources and improve operational efficiency. The second award was a project award for the NIH National Institute of Environmental Health Sciences (NIEHS). NIH and NIEHS completed construction of the Department's first net-zero energy facility, designed to generate enough solar photovoltaic power generation to more than offset total energy consumption on an annual basis — cutting costs, conserving energy resources, and improving the site's security and resilience. The facility is also on pace to meet LEED Platinum certification through the U.S. Green Buildings Council.