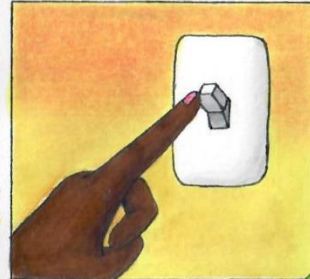




U.S. Department of Health & Human Services

2022 Sustainability Plan

BE A PLANET PROTECTOR



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Grade 7

U.S. Department of Health and Human Services 2022 Sustainability Plan

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Acronym List

Acronym	Definition
AE	Architectural and Engineering
CDC	Centers for Disease Control and Prevention
CFE	Carbon Pollution-Free Electricity
CUP	NIH Bethesda Campus Central Utility Plant
DGS	Document Generating System
EAC	Energy Attribute Certificate
EJ	Environmental Justice
EO	Executive Order
EVSE	Electric Vehicle Supply Equipment
FDA	Food and Drug Administration
FY	Fiscal Year
HHS	U.S. Department of Health and Human Services
IHS	Indian Health Service
NIH	National Institutes of Health
OCCHE	Office of Climate Change and Health Equity
OpDiv	Operating Divisions
PSC	Program Support Center
RO	Reverse Osmosis
ZEV	Zero-Emission Vehicle

1. Department of Health and Human Services Sustainability Plan Summary

The U.S. Department of Health and Human Services (HHS) has developed an overall strategy for addressing climate and sustainability goals of Executive Orders (EO) 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*, and 14008, *Tackling the Climate Crisis at Home and Abroad*. HHS is focusing on the two main goals of net-zero emissions and climate resilient facilities. Each overarching goal has primary subgoals that HHS will strive to meet by following the EO 14057 Implementing Instructions and by performing climate vulnerability assessments. HHS will prioritize completion of energy and water evaluations and climate vulnerability assessments to identify projects, budgets, and staff required for implementation.

2. Priority Actions Towards Goals

A. 100 Percent Carbon Pollution-Free Electricity

HHS will focus on first, installing on-site renewable energy generation; second, procuring grid-supplied carbon-free electricity (CFE); and third, procuring energy attribute certificates (EACs) to meet the 100 percent CFE goal. HHS priority actions include:

- HHS Operating Divisions (OpDivs) will ensure all facility evaluations and assessments include on-site CFE application analyses.
- In Fiscal Year (FY) 2022, the Food and Drug Administration (FDA) used the U.S. Department of Energy ReOpt software to assess CFE options. (September 2022)
- HHS quantified emissions from purchased electricity by e-Grid region to prioritize locations for on-site installations and CFE procurement. (June 2022)
- For HHS traditional leases that are new, replacing, succeeding, and superseding leases entered after September 30, 2023, for at least 25,000 rentable square feet and the government leases 75 percent of the total square footage, procure either grid supplied CFE or procure EACs to meet 100 percent CFE goal.
- The National Institutes of Health (NIH) Poolesville and Centers for Disease Control and Prevention (CDC) San Juan Campus will complete the installation of 1.2 megawatts of solar photovoltaic projects by December 2022.

B. 100 Percent Zero-Emission Vehicle Fleet

HHS will work to meet the FY 2022 zero-emission vehicle (ZEV) and electric vehicle supply equipment (EVSE) targets. HHS priority actions include:

- The HHS Program Support Center (PSC) Transportation Services finalized the Electric Vehicle Charging Policy and marketing campaign for the Hubert. H Humphrey Building Electric Vehicle Charging Program. (October 2022)
- NIH purchased eight plug-in hybrid electric vehicles in FY 2022 meeting 100% of the NIH target for ZEV acquisitions. CDC ordered six new electric vehicles. HHS acquired 32 total ZEV in FY 2022.
- HHS OpDivs plan to allocate \$5 million in FY 2023 for EVSE installments and need assessments.

C. Net-Zero Emissions Buildings, Campuses, and Installations

i. Design and Construction for Net-Zero Emissions

HHS design and construction guidelines will be updated to include EO 14057 net-zero emission goals and staff will be trained on the requirements. The HHS High-Performance Buildings workgroup meets quarterly to collaborate on new construction and design initiatives and actions. FY 2022 priority actions include:

- The Indian Health Service (IHS) Division of Engineering Services developed the [IHS 2022 AE Design Guide](#) to standardize the architectural and engineering (AE) requirements for IHS health care facilities. (September 2022)
- CDC will complete construction on one research support building in Atlanta and a new consolidated campus in Cincinnati that will meet Leadership in Energy and Environmental Design Gold standards. (November 2024)
- HHS will explore the feasibility of installing electrode boilers to replace combustion boilers at HHS facilities.

ii. Increasing Energy Efficiency

HHS OpDivs will focus on facility evaluations to highlight energy efficiency projects for implementation. HHS priority actions include:

- CDC will engage in Phase 2 of the Atlanta campuses utility energy service contract. The preliminary cost investment is \$8.4 million for an energy savings of more than \$10 million. (Contract award expected Quarter 4 of FY 2023)
- The FDA Jefferson Laboratories Complex will begin constructing a new central chiller plant to significantly increase energy efficiency. (September 2023)
- IHS will replace fuel oil boilers with a geothermal well field and heat recovery chillers at the Red Lake Hospital. (June 2025)
- NIH will install several energy projects for the Bethesda Campus Central Utility Plant (CUP) including variable frequency drives on the chillers, air handling unit upgrades, chiller replacements, and controls upgrades for chillers and boilers. (Ongoing through FY 2025)

iii. Increasing Water Efficiency

HHS OpDivs will focus on facility evaluations to highlight water efficiency projects for implementation. FY 2022 priority actions include:

- NIH CUP projects include cooling tower side stream filtration systems to remove suspended particles, improve efficiency, and reduce the amount of water rejected from the system, and replacement of isolation valves to prevent water loss and reduce the amount of cooling tower make-up water. (December 2022)
- IHS will complete construction of 20 units of residential housing (quarters) with low flow water fixtures. (September 2023)

D. Reducing Waste and Pollution

HHS OpDiv environmental staff work closely with facilities operations staff to ensure waste and pollution reduction efforts are continuously monitored and improved with the support of HHS headquarters. Initiatives include a focus on the initial reduction of waste generated, maximization of recycling and composting programs, and management of construction and debris waste. HHS priority actions include:

- OpDivs will continue to identify actions to reduce waste and pollution including enhanced recycling and composting, for example the NIH Bethesda campus will initiate pre-consumer foods composting in cafeterias. (December 2022)
- OpDivs will reduce the environmental impact of government travel by prioritizing or incentivizing virtual meetings, “green” travel options, and including funding for carbon offsets in travel reimbursement.
- Laboratory waste minimization is an HHS focus with OpDivs maximizing recycling of lab plastics, glass bottles, batteries, and Styrofoam; repurposing unused general lab supplies and

chemicals to other labs; using larger medical waste totes to replace smaller boxes; and redesigning lab procedures to reduce solvent use and spills.

E. Sustainable Procurement

HHS has a very proactive Sustainable Acquisitions Team that is working to incorporate the goals of EO 14057 and the HHS Climate Adaptation and Resilience Plan. The team consists of headquarters and OpDiv subject matter experts who are focusing on the update of the HHS Affirmative Procurement Plan sustainability sections, proper use of product service codes, and staff training. FY 2022 priorities include:

- Development of a Sustainable Procurement Directive that will weave all aspects of sustainability and climate into the responsibilities of acquisition workforce such contracting officers, contracting officers' representatives, project, and managers, etc.
- Enhancement of sustainable procurement training specifically highlighting applicable product service codes.
- Assessment on how to apply sustainable procurement to laboratory supply and services procurements.
- NIH will upgrade a Document Generating System (DGS) to enhance relevant Federal Acquisition Regulation sustainability requirements. The DGS is used to generate contracts, Blanket Purchasing Agreements, and NIH Government-wide Acquisition Contracts. (September 2023)

F. Climate- and Sustainability-Focused Federal Workforce

The HHS Sustainability Outreach Workgroup collaborates with the HHS Office of Climate Change and Health Equity (OCCHE) to address climate and sustainability literacy of both the facilities/operations and mission-related staff. This Climate Literacy Team will focus on the following actions:

- In FY 2022, an HHS Earth Day Speaker Series was broadcast on HHS Live streaming and the recording is posted on the HHS YouTube channel, <https://www.youtube.com/user/USGOVHHS>.
- Also in FY 2022, a Federal Employee Viewpoint question on sustainability was updated, and draft performance management appraisal program language was developed on climate change.
- Development of an HHS-wide climate and human health training module.
- Transformation of the Earth Day Speaker Series into a Climate Speaker Series.
- Collaboration with OpDivs on sustainability and climate outreach efforts, and with OCCHE to ensure climate literacy efforts reach program and operations staff.

G. Incorporating Environmental Justice

HHS established the HHS Office of Environmental Justice in May 2022 (sitting within the Office of Climate Change and Health Equity) to improve the well-being of underserved communities who tend to bear the negative impact of environmental and climate issues. This office will work closely with the HHS programs and facilities/operations staff. HHS priorities include:

- Development and implementation of an HHS-wide strategy on environmental justice and health.
- Coordination of annual HHS environmental justice reports.
- Development of training opportunities to build an environmental justice workforce.
- Identification of thirteen programs to maximize benefits to disadvantaged communities under the Justice40 Initiative.

- IHS is employing New Facility Project Leadership Teams that include tribal representatives in the planning, design, and construction of new IHS facilities.

H. Accelerating Progress through Partnerships

HHS promotes partnerships and collaborations with other federal agencies, tribes, universities, energy services companies, utilities, and private organizations to accelerate sustainability and climate initiatives. HHS priorities include:

- The NIH Bethesda Campus and CDC Atlanta campuses will expand utility energy savings contract projects. (September 2022)
- CDC will co-write a Canada-US Collaboration on Climate Change and Health: Transborder issues of concern and moving forward together. (November 2022)
- The CDC Building Resilience and Climate Effects Framework, which identifies climate-related health impacts and develops adaptation plans, will evaluate potential grantees to help communities prepare for the effects of climate change. (December 2022)
- CDC will continue collaboration with external and cross-agency partners on the CDC Climate and Health Program.

3. Progress Examples

100 Percent Carbon Pollution-Free Electricity

Starting in FY 2022, two HHS commercial buildings will purchase 50 percent renewable energy through the General Services Administration 48-month bulk buy contract. While the renewable energy does not meet the specific CFE requirements of the EO 14057 Implementing Instructions, it will decrease the overall energy use of the buildings.

Design and Construction for Net-Zero Emissions

CDC completed construction on the Roybal East Parking Deck in FY 2022. The deck increases parking availability on campus while enhancing resiliency of the Roybal Campus by being the first net-zero energy parking structure. Solar panels completely offset the peak-load energy consumption for the structure, including 16 high-capacity electric vehicle charging stations. Occupancy-sensing light emitting diode lighting was used throughout the building, which was designed with a primarily open design to reduce the need for mechanical ventilation and sprinklers. Rainfall at the parking deck is captured and flows to a cistern where it is processed through an on-site treatment system and available for deck washdown via spigots on each level. Adjacent to the bicycle parking area and the e-bike charging will be educational signage that explains the project's sustainable features. The parking deck structure received the Parksmart Bronze level certification.

Increasing Water Efficiency

NIH installed a reverse osmosis (RO) system at the Bethesda CUP that removes dissolved solids to reduce boiler blowdown frequency. The RO system reduces water consumption, energy consumption, and the amount of chemicals used for water treatment. Annually, the RO system saves roughly 28 million gallons of water, 55,907 million British thermal units of natural gas, and \$1 million.

Reducing Waste and Pollution

CDC has identified a project to reduce waste generated from laboratory spill containment cabinets. Chemical storage and handling safety procedures require secondary spill containment to prevent spills, injuries to workers, and damage to the environment. A core component of secondary spill containers is the spill absorbent material. Previously, CDC used an absorbent material with a 3-year shelf life but has now identified a new product with a 10-year shelf life. The new product will eliminate the need to change out the absorbent material every 3 years, divert 2 tons of hazardous waste from disposal, and save approximately \$60,000.

CDC replaced chemicals used in cage washing to lower environmental impact of sewer discharge at Roybal Campus in Atlanta, GA in September 2022. A new cage wash system further reduces the chemicals discharged to the sewer. Additionally, an environmental data management software system was implemented to monitor and minimize wastewater pollutants.

Climate- and Sustainability-Focused Federal Workforce

The HHS Climate Literacy Team coordinated a [2022 Earth Day Speaker Series](#) that broadcasted on HHS Live from April 19th through 21st. The speaker series streamed presentations from National Aeronautics Space Agency, National Oceanic Atmospheric Administration, and HHS' OCCHE that provided valuable information on how and why our global climate is changing, the impacts of climate change on our environment and health, and what we can do about it locally. The presentations had 836 live viewers for an average of 279 viewers per presentation. The recordings were posted on the HHS YouTube Channel and currently have an average of 2,500 views each. HHS plans to evolve this speaker series into an on-going Climate Change Speaker Series.

Incorporating Environmental Justice

CDC has developed an [Environmental Justice \(EJ\) Dashboard](#) that presents customizable data on environmental exposures, community characteristics, and health burden in infographics and maps. All data on the EJ Dashboard is available on CDC's Environmental Public Health Tracking Network.

HHS PSC staff coordinated the Environmental Justice track at the 2022 Federal Environmental Symposium which was attended by more than 1,500 federal employees.

Accelerating Progress through Partnerships

CDC is progressing climate progress through partnerships with seven non-profits that are funded by CDC to perform climate and health work. The non-profits work on the Strengthening Public Health Systems and Services Through National Partnerships to Improve and Protect the Nation's Health Program. The goals of this program are to strengthen the nation's public health infrastructure; ensure a competent, current, and connected public health system; and improve the delivery of essential public health services through capacity-building assistance. This initiative asks each partner to identify key collaborators and stakeholders that they intend to serve and assist with climate and health.

To complement HHS's inward-facing sustainability work, the OCCHE within the Office of the Assistant Secretary of Health has convened a Climate Change and Health Equity working group to coordinate contributions of HHS operating divisions to advancing climate health in their interactions with health systems and in their external programming; OCCHE also convenes a

learning network between federal health systems (e.g., IHS, Veterans Health Administration, Military Health System) to exchange learning on sustainability and resilience.