



# 2018 Annual Sustainability Report

## A Decade of Sustainability

The Centers for Disease Control and Prevention (CDC) promotes efficiency and operational improvements for increased quality, accountability, and stewardship of CDC assets. As part of the Department of Health and Human Services (HHS), CDC strives for sustainable workplaces and operations to support our overarching health promotion mission. This year, the Go Green Get Healthy Initiative celebrates a decade of promoting sustainable practices that support employee and public health. Sustainability is not just about the health and well-being of the planet, it is about the health and well-being of our people.



**U.S. Department of  
Health and Human Services**  
Centers for Disease  
Control and Prevention

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[www.cdc.gov/sustainability](http://www.cdc.gov/sustainability)

# OUTREACH AND PARTNERSHIPS

## Recycling Ambassadors Program

The Recycling Ambassadors program recruited recyclers across CDC to share lessons and engage in educational programming, including Materials Recovery Facility (MRF) site visits. This year, Recycling Ambassadors focused on improving how CDC communicates its recycling policy to the workforce.

## Atlanta Better Buildings Challenge Panel Series

The City of Atlanta and local partners launched the [Atlanta Better Buildings Challenge \(ABBC\)](#) in 2011. In accordance with the U.S. Department of Energy's Better Buildings Challenge, ABBC encourages building managers to think sustainably in their approach to building construction and maintenance. Sustainable design and construction can enhance occupant health and limit environmental waste. This year, CDC facilitated four collaborative education sessions with ABBC, community design leaders, and CDC health experts. These discussions included topics covering healthy building materials and sustainable design examples.

## Fitwel Certifications for Healthier Buildings Expansion

CDC partnered with the Center for Active design to expand Fitwel® certifications to incorporate healthy design strategies at home and work. The program recognizes buildings that prioritize occupant health and encourages designers to improve health through built environments. Amenities such as accessible stairs, lactation rooms, and walking trails all contribute positively to occupant health.

## Leading Healthier Design Efforts

The American Institute of Architects' Design and Health Leadership Group (AIA) partnered with CDC to promote healthy design programs for architects and designers. CDC experts presented information on positive health outcomes from evidence-based design to more than 300 designers at the AIA Conference on Architecture 2018.

## Improving Laboratory Sustainability

CDC and the National Institutes of Health (NIH) jointly developed the next edition of the Biosafety in Microbiological and Biomedical Laboratories (BMBL), the seminal resource guide for designing and operating laboratories. Private and public sector laboratories worldwide look to this document for proper guidance on planning safe, efficient lab environments. The guide's new sustainability appendix helps designers plan laboratories that limit environmental waste through safer design and green chemistry. Green chemistry is a methodology for improving the way chemistry is conducted so that it has fewer negative impacts on people and the environment.



CDC sustainability intern creates recycling signage



CDC's Chief Sustainability Officer Liz York moderates a panel discussion on healthy building materials

### SUSTAINABILITY GOAL AREAS

-  **GOAL 1** Energy/Greenhouse Gas Emissions Reduction | *Bruce Jue*
-  **GOAL 2** Performance Contracts | *Steve Klim and Sarah Gray*
-  **GOAL 3** Renewable Energy | *Bruce Jue*
-  **GOAL 4** Water Efficiency | *Bruce Jue*
-  **GOAL 5** Sustainable Buildings | *Steve Klim*
-  **GOAL 6** Fleet Management | *Shirley Alston*
-  **GOAL 7** Sustainable Acquisitions | *Sarah Gray*
-  **GOAL 8** Waste Management | *Willie Potter*
-  **GOAL 9** Electronic Stewardship | *Tim Horner*

## Design for Health Webinar Series

CDC's Design for Health webinars explored the connections between health and the built environment. The webinars examined the science behind healthy design and translated it into actionable strategy. Partners in this series included JLL, the Center for Active Design, CDC's National Center for Chronic Disease Prevention and Health Promotion, Eco-works Studio, GSA, Harvard University Department of Environmental Health, Harvard University's Office of Sustainability, University of Arizona College of Medicine, Harvard University's Rensselaer Polytechnic Institute's Lighting Research Center, UPS, Mithun, and the US Green Building Council.

## National Institutes of Health Conference

The Department of Energy, NIH, CDC, and healthy design experts met to discuss recent developments in healthy building research. The conference examined data and metrics that quantify the built environment's health impact. These data correlated positive sustainable design practices to positive occupant health impact. The meeting concluded with applications of these data for improving health outcomes through sustainable building design. New collaborations within the design community will put healthy design research into practice.



26%  
reduction in energy intensity  
from 2003 baseline



44%  
total electricity use  
from renewable sources



37%  
reduction in potable water  
intensity compared to FY 2007

# PROJECTS AND ACHIEVEMENTS

## Creating Healthier Buildings: Fort Collins

During FY 2018, CDC assessed the CDC Fort Collins, Colorado, Campus laboratory building using the Fitwel benchmarking system. The building received a one star building benchmark for its appropriate signage, fresh foods access, walking trails, and healthy building design principles. The Fitwel benchmarking of the Fort Collins laboratory building exemplifies CDC's commitment to protecting employee health.

## Lawrenceville Solar Array and Pollinator

### Habitat Installation

A one-acre ground-mount solar array was installed at the CDC Lawrenceville Campus. This solar array includes pollinator-friendly native groundcover instead of gravel, and is the first of its kind in Georgia. The 249 kW array will generate enough energy to offset energy consumption of the Lawrenceville Campus' second-largest building.

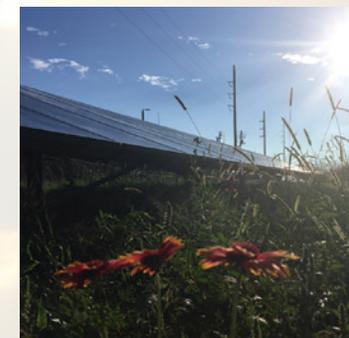
## Improved Recycling Communications

In 2017, the CDC Waste Characterization study recommended an extensive communications plan to educate staff on recycling procedures. This year, CDC expanded the "shadowbox" cafeteria waste signage pilot to the Chamblee Campus. CDC also launched a universal signage program for breakrooms and common areas, aligning recycling communications across CDC campuses nationwide.

## Freezer Efficiency Excellence

### and Best Practice Sharing

Over 175 labs representing 28 global organizations competed in the International Institute for Sustainable Laboratories' (I2SL) International Freezer Challenge. This challenge encouraged researchers to practice efficient cold storage management. CDC won the organizational award for saving an estimated 140,000 kWh/year, and CDC's Inorganic & Radiation Analytical Toxicology Laboratory Branch won an individual lab award. Participants shared information in a panel discussion about CDC's room-temperature sample storage processes, and how they overcame the difficulties the challenge posed.



CDC Lawrenceville campus solar array and pollinator habitat project

## Freezer Management Improvement Planning

CDC operational experts and laboratory scientists evaluated existing freezer management systems. This evaluation targeted opportunities to improve freezer operations for CDC's vast collection of biological samples. CDC freezer equipment is responsible for protecting \$3 billion of historical and working samples. This group quantified the equipment's end-of-life replacement parameters, and began a freezer standard operating procedure development process for FY 2020 implementation.

## Improved Office Efficiency and Quality

An open space alternative design pilot allows staff to work comfortably and ergonomically. The new designs are proven to promote health, improve employee engagement, and are key features of healthy, modern workplaces. Two large office areas were repurposed to include new areas for individual work, team spaces, and meeting rooms. The new workspace prioritizes occupant health with standing desks, expansive natural lighting, and open-concept seating. This concept serves not just as a renovation but works to serve as a flagship for the agency.



# 10 FOR 10 CHALLENGE

The CDC Sustainability Office celebrated 10 years of the Go Green, Get Healthy Initiative in FY 2018. To commemorate the anniversary, CDC laboratories and offices were asked to participate in the 10 for 10 Challenge. The challenge identified 10 sustainable strategies, aligned with sustainability requirements in the President's new Executive Order 13834 titled Efficient Federal Operations, which CDC teams can implement in healthy competition with each other.

What CDC offices can do:

1. Join the Recycling Ambassadors to reduce waste in your workspace.
2. Circulate and champion at least three Green Guides in your office.
3. Nominate a Sustainability Star—you or someone you know who promotes green practices.
4. Benchmark your office with the Fitwel healthy building certification system.
5. Start a "Turn Off the Lights" campaign in your meeting rooms and office areas.

What CDC labs can do:

6. Participate as a CDC laboratory in the International Freezer Challenge.
7. Implement recycling options for one of your laboratories.
8. Join the International Institute of Sustainable Laboratories Georgia Chapter.
9. Green your laboratories with the How to Green Your Laboratory checklist.
10. Save energy by conducting a lab equipment audit and eliminating unnecessary cycles or unplugging rarely-used equipment.



500,000 kWh/yr  
saved by CDC laboratories' participation  
in two Freezer Challenge competitions



100%  
electronic devices purchased in FY 2018  
are registered EPEAT (Electronic Product  
Environmental Assessment Tool) compliant



56%  
recycling rate for  
Atlanta-area owned campuses



## LETTER FROM THE CSO

In FY 2008, we asked CDC staff to suggest names for the new environmental stewardship and health promotion initiative that we now call *Go Green, Get Healthy!* We received hundreds of suggestions from staff all over the nation. Today, staff from around the world are still working to make CDC greener and healthier through projects and initiatives

like the ones you see highlighted in this annual report. We've made great progress over these years, including water reduction successes saving over \$5 million at the Roybal Campus to date. This year, we are asking for even more involvement with the 10 for 10 Challenge, in the hopes that staff everywhere can be a part of the success of CDC's improvement efforts. Please join me in congratulating CDC on 10 years of sustainability innovation—and let's continue the significant progress we have made into the next 10 years!

Sincerely,

**Liz York, FAIA**

Chief Sustainability Officer (CSO)

Associate Director for Quality and Sustainability

## 2019 UPCOMING PROJECTS

**FITWEL BENCHMARKING AND CERTIFICATIONS**

**CONTINUING THE ATLANTA BETTER BUILDINGS CHALLENGE PARTNERSHIP**

**2019 INTERNATIONAL LABORATORY FREEZER CHALLENGE**

**EXPANDED FLEET TRACKING SYSTEMS**

**FEDERAL CONTRACT TRACKING IMPROVEMENT**

**FREEZER LIFECYCLE PROCESS DEVELOPMENT WORKING GROUP**

**INCORPORATING HEALTHY BUILDINGS STRATEGIES INTO FEDERAL BUILDINGS**

**FEDERAL ENVIRONMENTAL SYMPOSIUM AT THE NATIONAL INSTITUTE OF HEALTH**

## 2018 SUSTAINABILITY STARS

**HEALTHY CHOICES IN THE WORKPLACE** (Team)

**LABORATORY SPACE SHARING INITIATIVE** (Team)

**CDC RECYCLING AMBASSADORS**

**JESSICA CHEN**

**CHRISTINA NELSON**

**STASIA WIDERYNSKI**

**CHRISTINA BROSIUS**

**CHERYL TARR**

**RHONDA RILEY**

**SCOTT KEMP**

## EXECUTIVE ORDER 13834 EFFICIENT FEDERAL OPERATIONS HIGHLIGHT

On May 17, 2018, President Trump signed Executive Order (EO) 13834, titled Efficient Federal Operations. The focus of this EO is to establish streamlined goals for energy and water efficiency, high-performance buildings, renewable energy consumption, purchasing, and other aspects of managing agency operations. The administration will drive action and focus on increasing the efficiency of the federal government and its facilities. The new executive order establishes long-range, required targets and annual incremental goals.

## 2018 FEDERAL ENERGY MANAGEMENT AWARD - CDC EXCELLENCE IN FREEZER MANAGEMENT

The [Federal Energy and Water Management Awards \(FEMP\)](#) recognize individuals, groups, and agencies for their outstanding contributions in the areas of energy efficiency, water conservation, and the use of advanced and renewable energy technologies at federal facilities. A CDC team, in collaboration with NIH, won the 2018 FEMP Award for Laboratories/Data Centers.

## HHS GREEN CHAMPION AWARD WINNERS

In FY 2018, CDC continued its leading role in environmental stewardship excellence.

**SUSTAINABLE ACQUISITIONS AWARD:** CDC Freezer Optimization Tiger Team—*Debbie Kuehl, Julie Chatt-Soroka, Patrick Gourley, Martin Vincent, Conrad Quinn, Emily Hays, Liz York*

**ELECTRONIC STEWARDSHIP:** CDC Printer Logic Project Team—*Phil Bourque, Robbie Gray, Barbara Woodland, Shirley Duque, Phillip Troy, Mohamad Al Malla*

**INDIVIDUAL ENVIRONMENTAL STEWARDSHIP:** Christina Nelson

**GOOD NEIGHBOR:** CDC Sustainability and Health Webinar Series—*Jackie Vintimilla, Joel Kimmons, Eduardo O'Neill, Corey Thomas, Jeff Adair, Mike Shaw, Emily Hays, Liz York, Lauren Dufort*

**GREEN LABS:** CDC Elemental Analysis Lab Freezer Challenge—*Deanna Jones, Jeff Jarrett, Adam Baer, Gulya Shakirova, Kristen Wallon, Melanie Franklin, Danielle Stukes, Zach Fultz, Darlyn Mercado*

**WATER USE EFFICIENCY:** CDC Autoclave Redesign for Water and Energy Efficiency—*Fatema Sadiq, Greg Rosser, Sarah Gray*

**WELLNESS:** CDC Wellness and Sustainability Partnership—*Marilyn Wolff, Lauren Holman Roberts, Rebecca Rentz, Desiree Brown, Emily Hays, Aidan Ganzert, Lauren Dufort*

**WELLNESS:** CDC AIA Design & Health Education Series—*Matthew Welker, Andrew L. Dannenberg, Judith Heerwagen, Andrew M. Ibrahim, Bon Kul, Elizabeth Powers, Elly Bunzendahl, Justus Stewart, Liz York*