

GSA Sustainability Plan: Public Buildings Service Update

GSA Green Building Advisory Committee
November 13, 2013



GSA Public Buildings Service

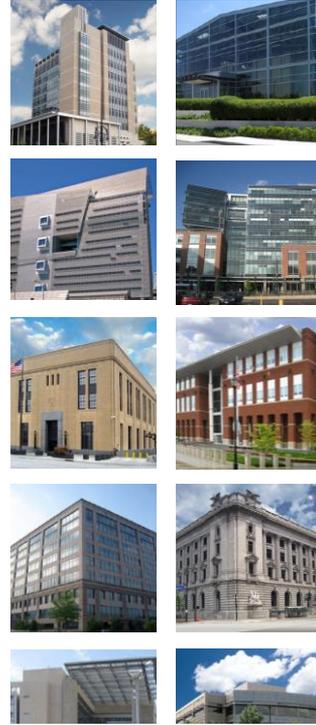


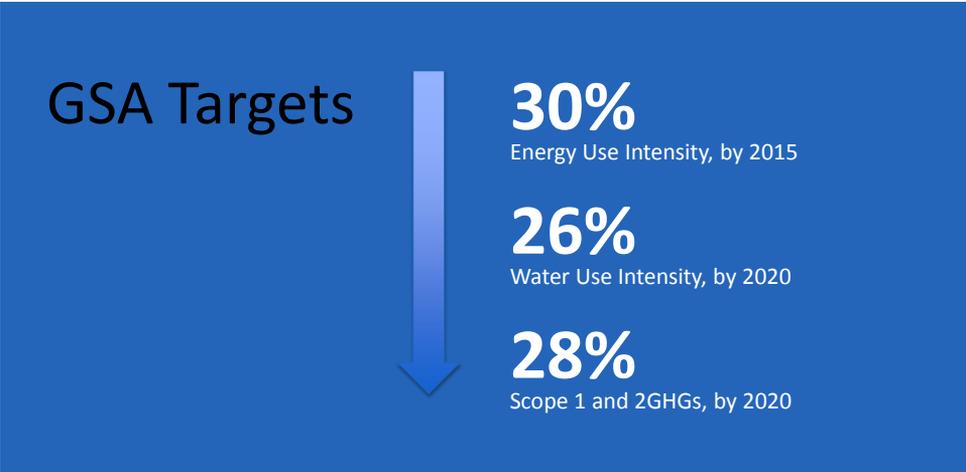
- Mission:

- Deliver the best value in real estate services to the federal government.

GSA Portfolio

- 375 million SF across the US
- Workspace for 1.1 million federal employees





Executive Order 13514, 2009
 Energy Independence and Security Act, 2007
 MOU on High Performance and Sustainable Buildings, 2006
 Energy Policy Act, 2005
www.wbdg.org/references/federal_mandates.php

GSA Sustainability Strategy



- Energy and Greenhouse Gas Emissions
 - Water Conservation
 - Waste Management
 - Sustainable Buildings
 - Sustainable Acquisition
 - Fleet Management
 - Electronics Stewardship
 - Climate Change Adaptation
- http://www.gsa.gov/portal/mediald/162943/fileName/GSA_FY2012_Sustainability_Plan

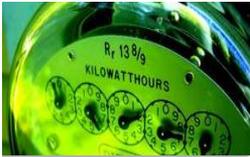
	Scope 1&2 GHG Emission Reduction Target For Scope 1&2 GHG Reduction Target of 28.7% by 2020: 36.9% reduction in 2012 and on track		Score: GREEN
	Scope 3 GHG Emission Reduction Target For Scope 3 GHG Reduction Target of 14.6% by 2020: 34.9% reduction in 2012 and on track		Score: GREEN
	Reduction in Energy Intensity Reduction in energy intensity in goal-subject facilities compared with 2003: 24.5% and on track for 30% by 2015		Score: GREEN
	Use of Renewable Energy Use of renewable energy as a percent of facility electricity use: Total of 20.9% from renewable electricity sources including at least 2.9% from new sources (thermal, mechanical, or electric)		Score: GREEN
	Reduction in Potable Water Intensity Reduction in potable water intensity compared with 2007: 19.2% and on track for 26% in 2010		Score: GREEN
	Reduction in Fleet Petroleum Use Reduction in fleet petroleum use compared to 2006: 36.0% and on track for 20% by 2015		Score: GREEN
	Green Buildings Sustainable green buildings: 10.00% of buildings sustainable		Score: GREEN



Goal Achievement - Buildings

BUILDING ENERGY AND EMISSIONS		FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	...	FY 20
Mandated Energy Reduction Goals (BTU/SF reduced from FY 2003 base year)		-15%	-18%	-21%	-24%	-27%	-30%	...	TBD
GSA Energy Intensity Reduction (BTU/SF reduced from FY 2003 base year)	Plan	-15%	-18%	-21%	-24%	-27%	-30%	...	37.5%
	Actual	-16.1%	-19.2%	-24.5%	...	...	...	...	...
Mandated Renewable Electricity Goals (% of electricity from renewable sources)		5%	5%	5%	7.5%	TBD	TBD	...	TBD
GSA Renewable Electricity Use (% of electricity from renewable sources)	Plan	10%	12%	14%	15%	18%	20%	...	30%
	Actual	12.5%	15.8%	20.9%	...	...	...	...	...
GSA Scope 1 & 2 Reduction (Reduced from FY 2008 base year)	Plan	-7%	-10%	-13%	-17%	-20%	-21.3%	...	-28.7%
	Actual	-12.7%	-20.3%	-36.6%	...	...	...	...	...
WATER USE EFFICIENCY & MANAGEMENT		FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	...	FY 20
Mandated Potable Water Reduction Targets (gallons/GSF reduced from FY 2007 base year)		-6%	-8%	-10%	-12%	-14%	-16%	...	-26%
GSA Potable Water Reduction (gal/GSF reduced from FY 2007 base year)	Plan	-6%	-8%	-10%	-12%	-14%	-16%	...	-26%
	Actual	-8.7%	-13.7%	-19.2%	...	...	...	...	...
SUSTAINABLE / GREEN BUILDINGS		FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	...	FY 20
GSA Owned and Leased Facilities Meeting Guiding Principles	Plan	5%	7%	10%	13%	15%	18%	...	30.5%
	Actual	5.8%	7.8%	10.8%	...	...	...	...	...
POLLUTION PREVENTION and WASTE ELIMINATION		FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	...	FY 20
GSA Non-Hazardous Solid Waste Diversion (non C&D)	Plan	base	10%	20%	30%	40%	50%	...	TBD
	Actual	...	36%	43%	...	...	...	...	...

Driving Environmental Performance



- Owned inventory
 - New construction
 - Facility management
- Leased inventory

Sustainable Buildings – Owned Inventory



New Construction and Major Modernizations

- PBS Facilities Standards (P100)

P100: <http://www.gsa.gov/portal/content/222281>
GSA Sustainable Design:
http://www.gsa.gov/portal/content/104462?utm_source=OGP&utm_medium=p rint-radio&utm_term=sustainabledesign&utm_campaign=shortcuts

Case Studies – Redevelopment & Major Modernization Projects

Federal Center South, Seattle WA

- Reuse and high levels of energy performance
- http://www.gsa.gov/portal/mediaId/148243/fileName/FCS_Press_Kit_2012_OCT_email

Edith Green Wendell-Wyatt , Portland OR

- Overall energy consumption reduced by 55 %
- Potable water consumption will beat state code by 60 %
- http://www.gsa.gov/portal/mediaId/172443/fileName/GSA_EGWYW_OPENING_BOOK_508b

Wayne Aspinall Courthouse, Grand Junction CO

- Aims to be GSA's first site net-zero energy building on the National Register of Historic Places.
- http://www.gsa.gov/portal/mediaId/164539/fileName/Digital_Aspinall_508



Operational Efficiency – Owned Inventory

- Energy/water use reduction
 - Evaluations
 - Benchmarking
 - Commissioning
 - Advanced metering
 - No/low-cost efficiency measures
 - ESPC commitment pursuant to Presidential Memorandum
- Waste diversion
 - Guidance and training



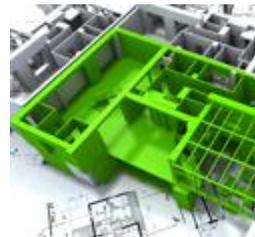
Sustainable Buildings – Owned Inventory



Existing Buildings

- Sustainable operations & maintenance
 - GSA operational policies and LEED EB volume framework
 - Training program for property management teams

Sustainable Buildings – Leased Inventory



- Request for Lease Proposal
 - Green lease provisions included in lease models
 - Requirements related to energy efficiency, systems commissioning, water conservation, and indoor air quality.

GSA Green Lease Policies and Procedures: <http://www.gsa.gov/portal/content/103656>

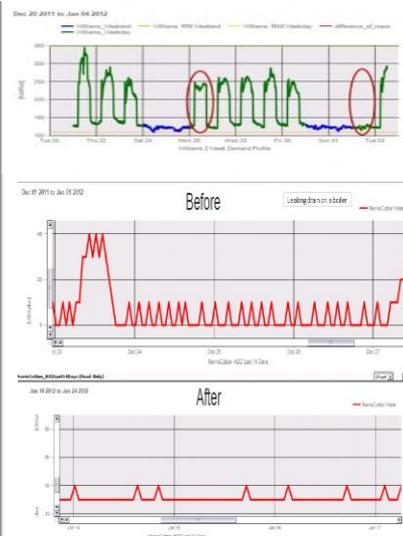
Technology Lever



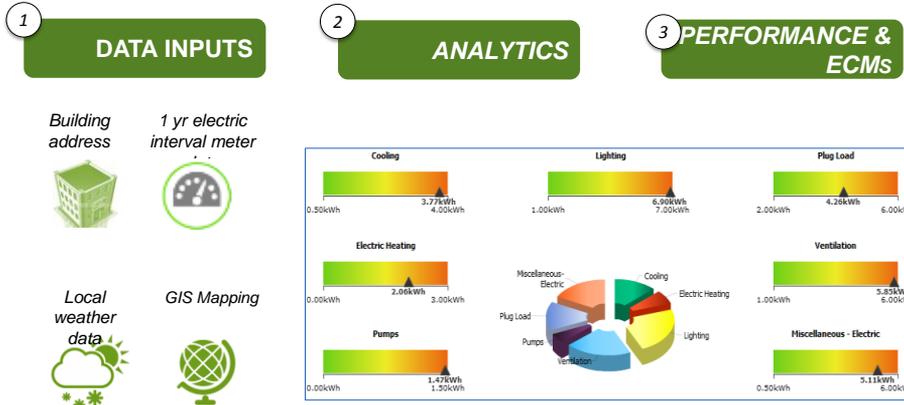
- Multiple GSA initiatives underway utilizing advancements in technology to accelerate environmental performance
 - Advanced metering
 - Rapid building assessments
 - GSALink
 - Green Proving Ground

Advanced Metering

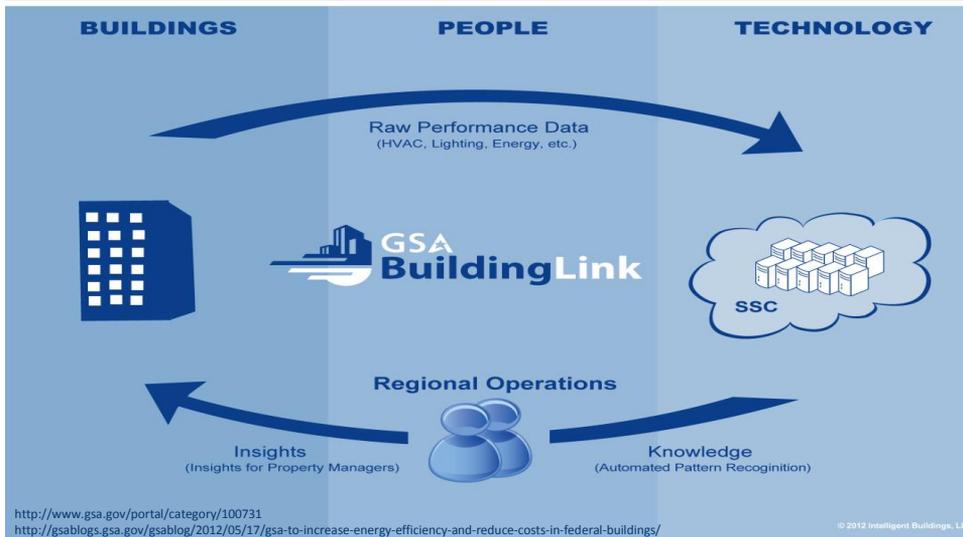
- 80% of agency's electricity consumption monitored



Rapid Building Assessments



Smart Buildings





Review the GPG FY14 RFI at the FedBizOpps website: www.fbo.gov keyword "gpg"

Gsa.gov/gpg

Questions?



Eleni Reed
 Chief Greening Officer
 GSA Public Buildings Service
 212.264.2613 eleni.reed@gsa.gov