

VA Sustainable Building Program

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Topics

1. Green Building Mandates & Implications for VA
2. Available Green Building Certifications
3. VA Green Building Program Milestones
4. Future Plans

1. Green Building Mandates & Implications for VA

❖ Federal Mandates - Existing Buildings

➤ EO 13514, sec. 2(g), iii:

“ensuring that at least 15% of the agency’s existing buildings (above 5,000 gsf) and building leases (above 5,000 gsf) meet the Guiding Principles by fiscal year 2015 and”

➤ Options:

EB-1

comply all guiding principles listed in the EO 13423

EB-2

initiate 3rd party certification process prior to Oct 1, 2008
AND get the certification developed by ANSI-accredited organization.

LEED &
Green Globe



1. Green Building Mandates & Implications for VA

❖ Federal Mandates - Major Projects

➤ EO 13514, sec. 2(g), ii:

“ensuring that all new construction, major renovation, or repair and alteration of Federal Buildings complies with the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings.....”

➤ 10 CFR Part 433.6, (b), (2):

“The cost of the building or major renovation is at least **\$2,500,000** (in 2007 dollars, adjusted for inflation)”

• Options:

NC-1: comply all guiding principles listed in the EO 13423

NC-2

initiate 3rd party certification process prior to Oct 1, 2008
AND get the certification developed by ANSI-accredited organization.

1. Green Building Mandates & Implications for VA

❖ Implications for VA

➤ Owns + Lease for VA

- ❑ 160 million sqft (98% medical space)
- ❑ Over 3,000 buildings \geq 5,000 sqft

➤ Sustainable Building Mandate by 2015

- ❑ 24 million sqft
 - ❑ \geq 450 buildings
- } Should be Green Buildings

➤ All Major Construction Project Should be Green:

- ❑ Many obstacles for HC facilities
- ❑ LEED HC (only 35 pts with meeting GP's)

2. Available Green Building Rating Systems

➤ ***Certification developed by ANSI-accredited organization:***

- LEED** (Leadership in Energy and Environmental Design)
- Green Globe**

➤ ***Other Green Building Rating System:***

- Earth Craft House** (Residential)
- Energy Star**
- ASHRAE Standard 189.1**
- BREEAM** (Building Research Establishment Environmental Assessment Method - UK)
- Green Star** (Green Building Council Australia)

3. VA Green Building Program Milestones

- **1st Sustainable Building survey (using GP's) - 2008**
- **Pilot Project (Ann Arbor VAMC) started June, 2008**
 - ❑ Dual certification (LEED & GG)
 - ❑ received GG certification, no LEED certification yet
- **Green Globe certifications for 21 Facilities (131 bldgs) - 2009**



Green Globe certification for San Diego VAMC

3. VA Green Building Program Milestones

VISN	MEDICAL CENTER	CERTIFICATION	# OF BLDGS
3	Brooklyn, NY	3 Green Globes	Entire Campus
6	Richmond, VA	3 Green Globes	Entire Campus
6	Asheville, NC	3 Green Globes	Entire Campus
6	Salisbury, NC	3 Green Globes	Entire Campus
6	Durham, NC	2 Green Globes	Entire Campus
7	Atlanta, GA	3 Green Globes	Entire Campus
7	Augusta (Uptown)	3 Green Globes	Entire Campus
7	Birmingham	3 Green Globes	1
8	West Palm Beach, FL	2 Green Globes	1
11	Detroit, MI	3 Green Globes	Entire Campus
11	Ann Arbor, MI	3 Green Globes	Entire Campus
12	Milwaukee, WI	3 Green Globes	1
16	Houston, TX	3 Green Globes	Entire Campus
16	Shreveport, LA	3 Green Globes	1
16	Little Rock, AR	3 Green Globes	1
17	Dallas, TX	3 Green Globes	1
20	Seattle, WA	3 Green Globes	1
20	Portland, OR	3 Green Globes	1
21	Oakland Mental Health Clinic	LEED Certified	1
22	LA ACC, CA	2 Green Globes	1
22	Loma Linda, CA	3 Green Globes	Entire Campus
22	San Diego	3 Green Globes	1

3. VA Green Building Program Milestones

LEED Certified Buildings	CERTIFICATION
Reno Regional Office	LEED Silver
Ft. Harrison Regional Office	LEED Certified
VISN 8 office (Bay Pine, FL)	LEED Silver
Oakland MH bldg	LEED Certified
Pittsburg VAMC bldg 69	LEED Certified
Boise Regional Office	LEED Gold



Boise VBA Regional Office – LEED Gold

3. VA Green Building Program Milestones

➤ **2nd SB Survey in 2009**

- ❑ Result – none of VA buildings meet all GP's
- ❑ Retro-Cx and day-lighting are common deficiencies

➤ **Sustainable Building Survey using Energy Star Portfolio Checklist – 2010**

- ❑ same result with 2009 survey

➤ **Sustainable Building survey (GG tool) – 2011**

- ❑ GBI was selected by competitive bid process
- ❑ ALL 173 Medical Centers – main hospital building
- ❑ 5 VBA Office Buildings
- ❑ Selected 11 campuses (170+) for GG and GP certifications
- ❑ 103 buildings received 3 or 4 Green Globes
- ❑ Expect 100+ buildings to receive GP certifications

3. VA Green Building Program Milestones

❖ Integrated Green Building Team were organized

Some Selected sites organized integrated green building team. Team members are:

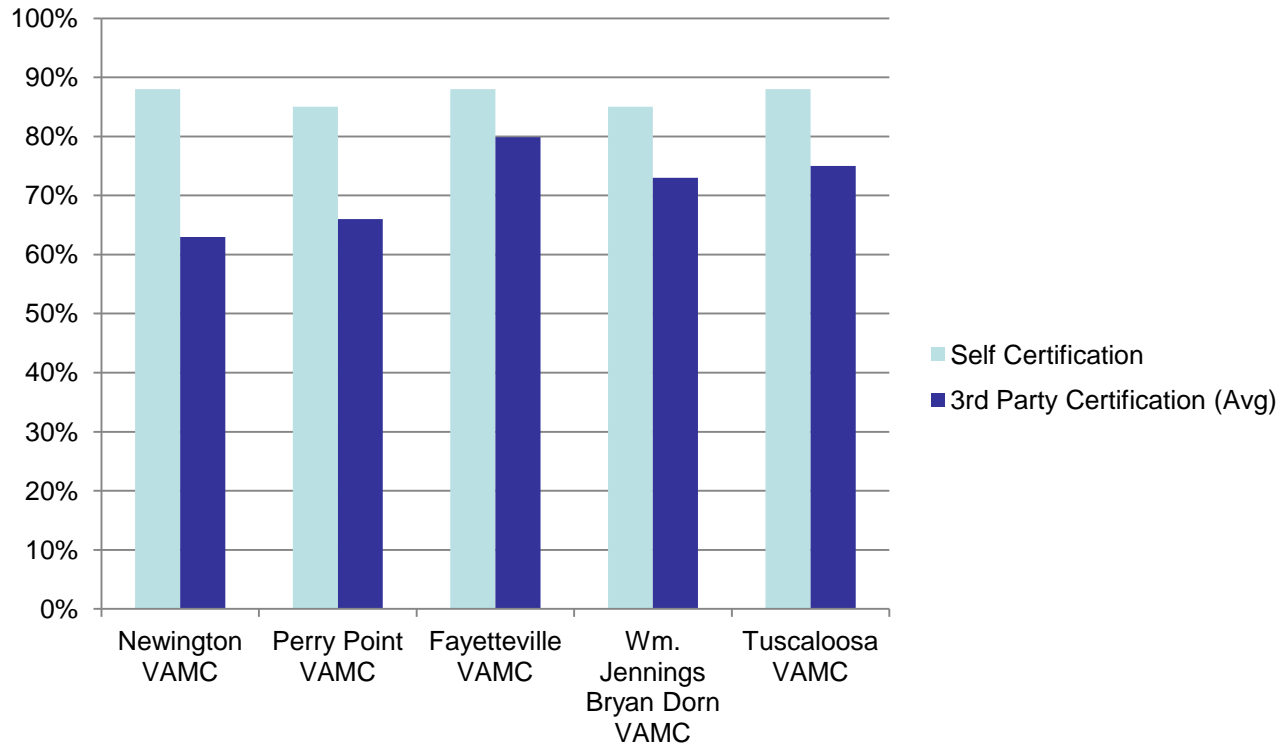
- Facilities Manager
- Environmental Manager
- Industrial Hygienist
- Energy Manager, facility
- Energy Manager, regional
- A/E consultant to this project
- Environmental Services
- Grounds
- Central Plant
- Infection Control
- HVAC / Electrical Technicians
- Purchasing
- Materials Handling
- Contractors



Improved communication
Raise Awareness
Recognitions

3. VA Green Building Program Milestones

➤ Can't rely on self certified scores:



3. VA Green Building Program Milestones

➤ Selection Criteria for certifications:

- Green Building Survey Results
- Energy Star Ratings (above 75)
- On-site Renewable Energy
- Square Footage
- Willingness – VAMC (sites)

4. Future Plans

❖ Ex. Buildings

- **GP Pilot will be completed April 2012**
- **2nd Round GP certification will start April 2012**
- **Annual Sustainability Survey will be performed –**
 - find & correct deficiencies
- **Improve Energy Star ratings**
 - Accuracy: square footage
 - Energy improvements: ECMs, renewable installations, etc.
- **Advanced Metering**
 - Improve Monitoring - Reporting
 - Improve facility energy management program

4. Future Plans

❖ Ex. Buildings

➤ Green Routine Pilot

- ❑ A building is only as sustainable as its users
- ❑ Promote Employee and Veteran awareness

➤ VA is positioned to meet the mandate aggressively:

	VA FY10 Actual	FY11	FY12	FY13
% GSF	13.54	14	14.5	15
% Buildings	4.20	7.5	12	15
VA # Buildings	131	251	375	468+

4. Future Plans

❖ Major and Minor projects

- Have to meet 5 Guiding Principles (21 sub requirements)
- Must meet the VA Sustainable Building and Energy Reduction Manual (<http://www.cfm.va.gov/til/sustain.asp>)
- Use 3rd party certifications (2 GG or LEED silver)

Question?

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