



Morse U.S. Courthouse
Eugene, OR



NOAA
Suitland, MD



EPA Science and Technology
Kansas City, KS



U.S. Census Bureau
Suitland, MD

Sustainability Defined, and questioned.

Lance Davis, AIA, LEED

16 August 2010



SUSTAINABILITY MATTERS

www.gsa.gov/sustainabledesign

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MATERIAL SIMPLICITY IS
ARTICULATED BY BOTH DAYLIGHT
AND ELECTRICALLY LIT PENETRATIONS
IN THE ENTRANCE LOBBY.





shown: THE LEASE FOR THE 600,000 SQUARE FOOT
IRS CAMPUS IN KANSAS CITY, MISSOURI,
REQUIRED LEED CERTIFICATION.







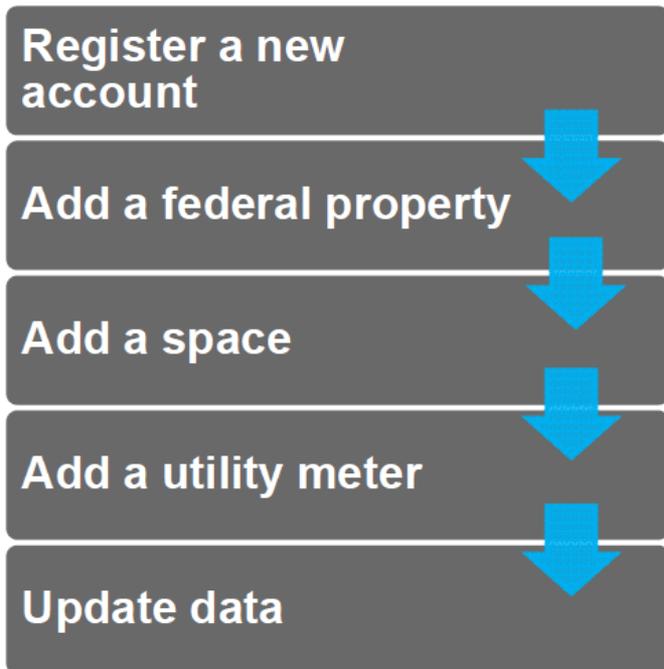
Guiding Principles for High Performance and Sustainable Buildings

- ▶ Energy Efficiency 30% better than ASHRAE 90.1.
- ▶ Energy Star Benchmarking
- ▶ Indoor water efficiency of 20%.
- ▶ Outdoor water efficiency of 50%.
- ▶ Ventilation and comfort to meet ASHRAE 55 and 62.1.

Guiding Principles

- ▶ Moisture Control strategy.
- ▶ Daylight factor of 2% in 75% of occupied space.
- ▶ Low emitting materials.
- ▶ Construction IAQ, 72 hour flush out.
- ▶ Recycled products per EPA or calculation.
- ▶ USDA biobased products.
- ▶ Salvage 50% construction waste.
- ▶ Eliminate ozone depleting compounds.

Portfolio Manager: Process Overview



Home > My Portfolio > Erin's Energy Efficient Edifice > Sustainability Checklist

Federal High Performance Sustainable Buildings Checklist

The purpose of this checklist is to assess Federal agencies with assessing their existing building stock against the Guiding Principles for Sustainable Existing Buildings, and for reporting on the sustainability data element of the Federal Real Property Profile (FRPP).

Agency: Department of Energy (DOE)
Department/Region:
Federal Campus:
Building Name: Erin's Energy Efficient Edifice
Federal Real Property ID: 12345678
Checklist Manager: Erin Zayko [edit](#)
Sustainability Path: Guiding Principles & Third-party [edit](#)

Guiding Principle Completion: 73%

last edit date: 10/23/2009 [Upload & View Compliance Documents on File](#) [Generate Report](#)

Indicates that "YES" has been selected for all guiding principles within a section.

Employ Integrated Design Optimize Energy Performance Protect and Conserve Water Enhance Indoor Environmental Quality Reduce Environmental Impact of Materials

Employ Integrated Assessment, Operation, and Management Principles

Guiding Principle	Action Required	Compliance Verification Documents on File	Responsible Team Member	Notes / Comments
Integrated Assessment, Operation, and Management				
Integrated 1	Use an integrated team to develop and implement policy regarding sustainable operations and maintenance. <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> In Process <input type="radio"/> Not Assessed References and Resources	<input checked="" type="checkbox"/> Team roster or equivalent <input type="checkbox"/> Completed "Responsible Integrated Team Member" fields <input type="checkbox"/> Other: <input type="text" value="enter document name"/>	Enter Name: <input type="text" value="Erin Zayko"/> View Note/Comment	
Integrated 2	Establish operational performance goals for energy, water, material use and recycling, and indoor environmental quality, and ensure incorporation of these goals throughout the remaining lifecycle of the building. Incorporate sustainable operations and maintenance practices within the appropriate Environmental Management System (EMS).	<input checked="" type="checkbox"/> EMS Manual that incorporates operational performance goals and sustainable operations and maintenance practices <input type="checkbox"/> Other: <input type="text" value="enter document name"/>	Enter Name: <input type="text" value="Mike Myers"/> View Note/Comment	

After the first two steps, users can access the Guiding Principles Checklist



Using the Guiding Principles Checklist

General use



Home > My Portfolio > Erin's Energy Efficient Edifice > Sustainability Checklist

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Employ Integrated Design **Optimize Energy Performance** **Protect and Conserve Water** **Enhance Indoor Environmental Quality** **Reduce Environmental Impact of Materials**

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Pre-populated building Info

Pie chart of status

Document repository

Green checkbox = complete

Compliance verification docs

Enter notes and comments

References and resources

Always
Save before
Exiting

Executive Order 13514



Federal Leadership in Environmental, Energy, and
Economic Performance



Morse U.S. Courthouse
Eugene, OR



NOAA
Suitland, MD



EPA Science and Technology
Kansas City, KS



U.S. Census Bureau
Suitland, MD

Requirements

- ▶ Accountability
- ▶ Performance Plan
- ▶ Green House Gas
- ▶ Buildings and Communities
- ▶ Water
- ▶ Fleet
- ▶ Pollution and Waste



USDA
Manhattan, KS



FDA
White Oak, MD



Denver Federal Center
Lakewood, CO



St. Elizabeth's
Washington, DC

Buildings and Communities

- ▶ 0 Net Energy for Designs in 2020
- ▶ Consolidate & Optimize Inventory
- ▶ Guiding Principles



DHS
Omaha, NE



NPS
Omaha, NE



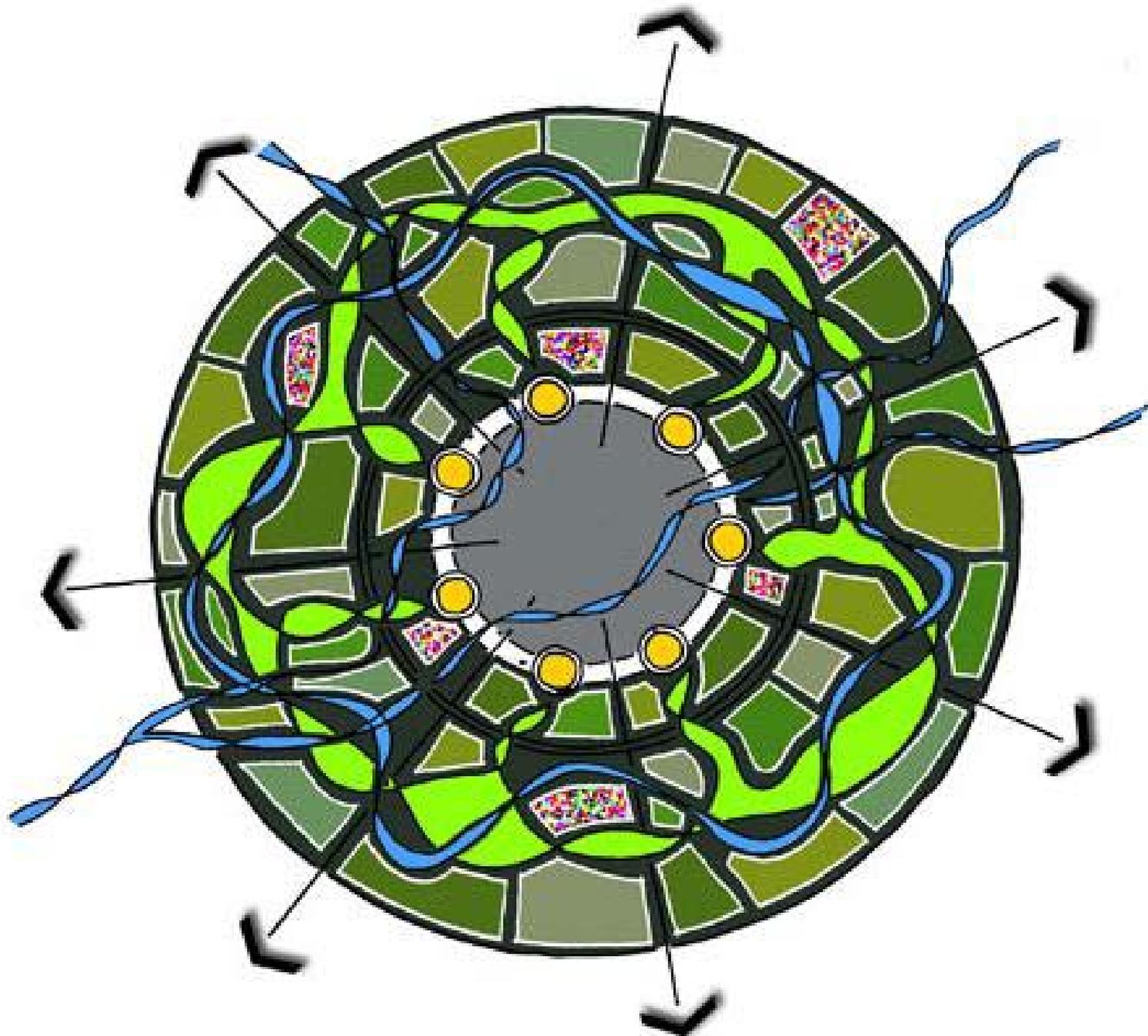
SSA
Auburn, WA



DOT
Washington, DC

GSA's Stretch Goals

Fossil Fuel Free
0 Net Site Energy
GHG Footprint
ZEF





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Discussion

Lance Davis, AIA, LEED

Lance Davis, AIA, LEED

GSA

lance.davis@gsa.gov