

# Demonstrating a Sustainable Energy-Saving Methodology for Library Environments

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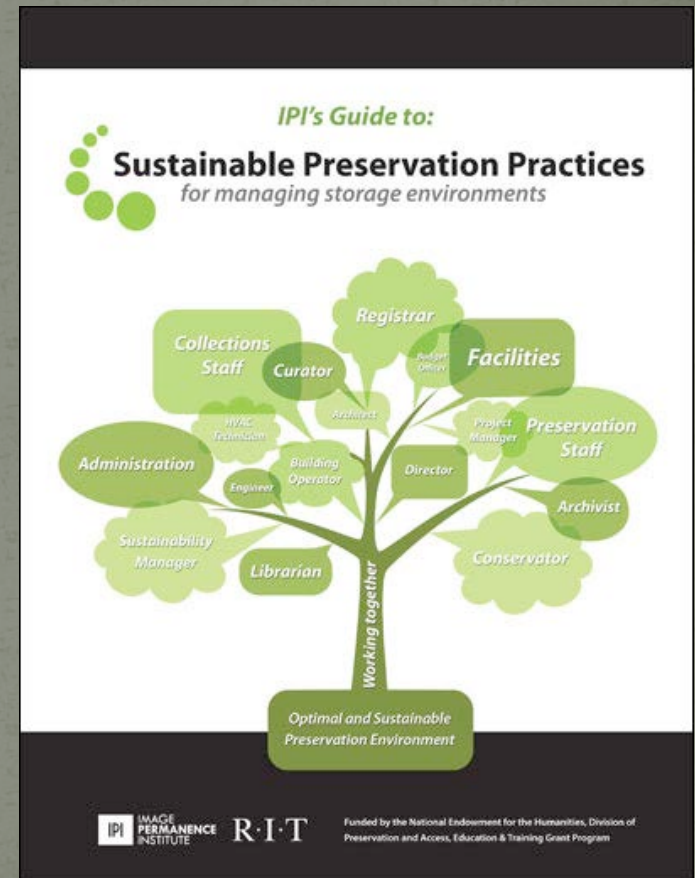
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# Hypothesis

- IPI's Guide to Sustainable Preservation Practices
- Covers the “why” – but not necessarily the “how”
- Potential strategies are known – but how do you know when to use them?
- Is it possible for a self-motivated institution to conduct risk-managed sustainability experiments without calling in outside experts?



# The Project

- 2013-2017 IMLS National Leadership Grant (Libraries – Demonstration)
- Goals –to write and demonstrate a sustainable preservation methodology that can be used by institutions
- Two components:
  - Writing – IPI staff, based on field and laboratory research and field consulting experience
  - Testing – Three field partners to create institutional teams to apply methodology with IPI guidance

# The Structure

- “Menu” approach – not prescriptive
- Introduction to the Process of Optimization
- The “Methodology”
  - Documentation
  - Data-Gathering
  - Data Analysis
  - Experimentation and Implementation
  - Assessment and Maintenance
- Energy-Saving Strategies
  - 7 common strategies
- References and Resources

## **B. METHODOLOGY** (Process)

### **B.1 Documentation Overview (and initial meeting)**

- Building Documentation to Gather (checklist)
  - Building Documentation Worksheet
- Mechanical System Documentation to Gather (checklist)
  - HVAC System Acronyms (also in reference section)
  - HVAC System Documentation Worksheet
  - Creating Zone Maps
- Collection Space Documentation to Gather
  - Collection Space Documentation to Gather (checklist)
  - Collection Space Documentation Worksheet

### **B. 2 Gathering Environmental Data**

***step two***

- Instrumentation
- Datalogging
- Using eCNB

### **B. 3 Data Analysis**

***step three***

- Preservation Analysis
- Recognizing inefficiencies
- Considering equilibration rates

### **B. 4 Experimentation and Implementation**

***step four***

- Selection of strategy
- Identifying potential risks
- Document how to assess the risk
- Potential gains
- Design experiment

### **B. 5 Assessment and Maintenance**

***step five***

- Periodic Review
- Quantification of results for preservation/energy
- Selection of adopted strategies
- Developing procedures for continuation

# Field Testing

- Three partners:
  - Hagley Museum and Library, Wilmington, DE
  - Colonial Williamsburg Foundation, Williamsburg, VA
  - Tulane University, New Orleans, LA
- Findings –
  - Each site approached with different goals/priorities, and found different benefits – some with a single approach, some with multiple strategies.



# Final Stages

- Project completion in November 2017
- Likely available to the field in early 2018
- “Binder” format – sections are modular

*Thank you!*