

## **PREPPING YOUR BUILDING FOR ENERGY EFFICIENCY UPGRADES**

### **STEP 1**

Track buildings energy use and utility data through EPA's Portfolio Manager

### **STEP 2**

Create Energy Audit team, ideal candidates include engineers/building and facilities managers, and members if different departments inhabiting the building.

### **STEP 3**

Create Inventory of mechanical features: HVAC, hot water, lighting, building envelope (If possible, include fixture counts and scheduled maintenance as well as planned future upgrades to any systems)

### **STEP 4**

Plan walk-through and train team on what to look for and opportunity sheets

### **STEP 5 WALKTHROUGH**

#### **WHAT TO LOOK FOR DURING WALKTHROUGH**

- Any drafts or gaps in building envelope including doors, windows (are they single or double pane? Energy Star certified? Storm Window?) attic space and basement space insulation?
- Are Staff members leaving lights on? Monitors? Using space heaters or fans? Are ducts card boarded shut or windows left open?
- What types of lighting fixtures are being used and is the light level appropriate?
- Are they outdated faucets, toilets, or water fountains? Check for flowrates
- Are there outdated refrigerators or microwaves?
- What type of HVAC system is being used? Check for dust/dirt around blower valves
- What type of hot water system is being used? Check leaks and insulation around unit and surrounding pipes.
- Are there sprinkler systems? Are they being properly winterized and checked in the spring for leaks and timing adjustments?

While not exhaustive, this list can begin to help to frame energy efficiency work. what to look for. An old mushroom hunting trick is to place a picture of the mushroom inside your cupboard, this is the same idea here.

### **STEP 6**

Analyze findings from walk-through and opportunity sheets

### **STEP 7**

Create suggested energy efficiency upgrade plan

TIP: When selecting projects, do not shy away from big investments that have a quick ROI. The cost savings incurred from these projects can go into smaller energy efficiency measures that can be done piece meal, such as indoor LED lighting conversion or improvements to building envelopes