



# Energy Efficiency Audit Checklist: Facility Sustainability & Cost Savings

## Building Envelope Assessment

Evaluate insulation, windows, doors, and roofing for energy loss.

### Wall R-Value (Current)

Enter a number...

### Roof R-Value (Current)

Enter a number...

### Window Type (Predominant)

- ☐ Single Pane
- ☐ Double Pane
- ☐ Low-E Coated
- ☐ Other

### Notes on Wall Condition (Cracks, Damage)

Write something...

### Door Sealing Condition

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor

### Photos of Building Envelope (Optional)

 Upload File

## HVAC System Evaluation

Inspect heating, ventilation, and air conditioning systems for efficiency and maintenance.

### Refrigerant Charge (lbs)

Enter a number...

### Supply Air Temperature (°F)

Enter a number...

### Return Air Temperature (°F)

Enter a number...

### Static Pressure (inches of water)

Enter a number...

### Filter Condition (Visual)

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor

### Blower Motor Operation

- ☐ Normal
- ☐ Audible Noise
- ☐ Overheating
- ☐ Not Operating

### Last Maintenance Date

Enter date...

### Notes/Observations

Write something...

## Lighting & Electrical Systems

Assess lighting types, usage patterns, and electrical system performance.

### Current Lighting Wattage per Square Foot

Enter a number...

### Target Lighting Wattage per Square Foot (Post-Upgrade)

Enter a number...

### Lighting Types in Use

- ☐ LED
- ☐ Fluorescent
- ☐ Incandescent
- ☐ Halogen
- ☐ Other

### Lighting Control System Present?

- ☐ Yes
- ☐ No

### Last Electrical System Inspection Date

Enter date...

### Number of Occupancy Sensors Installed

Enter a number...

### Dimming Capabilities Present?

- ☐ Yes
- ☐ No

### Notes on Electrical System Condition

Write something...

## Water Usage & Conservation

Evaluate water fixtures, irrigation systems, and identify conservation opportunities.

### Current Water Bill (Monthly)

Enter a number...

### Estimated Water Usage (Gallons)

Enter a number...

### Type of Irrigation System (if applicable)

- ☐ Sprinkler
- ☐ Drip
- ☐ Manual
- ☐ None

### Water-Saving Fixtures Present?

- ☐ Low-Flow Toilets
- ☐ Aerators on Faucets
- ☐ WaterSense Certified Appliances
- ☐ None

### Leaks Detected?

- ☐ Yes
- ☐ No
- ☐ Unsure

### Details of any leaks detected (if applicable)

Write something...

### Date of last irrigation system maintenance

Enter date...

## Equipment & Appliances

Check the energy consumption of major equipment and appliances.

### Refrigerator Energy Star Rating (if applicable)

Enter a number...

### Dishwasher Cycle Usage (cycles/week)

Enter a number...

### Oven Temperature Calibration (degrees)

Enter a number...

### Type of Washing Machines (if multiple)

- ☐ Front-load
- ☐ Top-load
- ☐ Energy Star Certified

### Estimated Monthly Usage (kWh) - HVAC

Enter a number...

### Last Maintenance Date - HVAC

Enter date...

### Notes on Equipment Condition & Usage

Write something...

## Building Management System (BMS)

Review BMS settings, data logging, and performance reports (if applicable).

### Current BMS Version

Enter a number...

### BMS Vendor

- ☐ Honeywell
- ☐ Siemens
- ☐ Johnson Controls
- ☐ Schneider Electric
- ☐ Other

### Summary of Recent BMS Events/Alarms

Write something...

### Last BMS System Backup Date

Enter date...

### Key Performance Indicators (KPIs) Monitored

- ☐ Energy Consumption
- ☐ Temperature
- ☐ Humidity
- ☐ Lighting Usage
- ☐ Equipment Runtime

### Alarm Notification Method

- ☐ Email
- ☐ SMS
- ☐ Dashboard Alerts
- ☐ Phone Call



# Employee Awareness & Behavior

Assess employee engagement in energy conservation practices.

## Estimated Employee Participation in Energy Saving Initiatives (Scale of 1-10)

Enter a number...

## Are energy-saving behaviors part of employee training?

- ☐ Yes
- ☐ No
- ☐ Not sure

## Describe current methods for communicating energy-saving tips to employees.

Write something...

## Which of the following employee behaviors contribute to energy waste?

- ☐ Leaving lights on in unoccupied rooms
- ☐ Leaving computers on overnight
- ☐ Adjusting thermostats excessively
- ☐ Using hot water unnecessarily
- ☐ Other (please specify in a long text field)

## Is there a designated 'Energy Champion' or team responsible for promoting energy conservation?

- ☐ Yes
- ☐ No
- ☐ Not sure

### Suggestions for improving employee engagement in energy conservation (optional)

Write something...

## Renewable Energy Potential

Explore opportunities for solar, wind, or other renewable energy sources.

### Annual Solar Irradiance (kWh/m<sup>2</sup>)

Enter a number...

### Roof Orientation (for Solar)

- ☐ North
- ☐ South
- ☐ East
- ☐ West

### Available Roof Area (m<sup>2</sup>)

Enter a number...

### Local Incentive Programs Available?

- ☐ Yes
- ☐ No
- ☐ Unsure

### Notes on Obstructions (Trees, Buildings)

Write something...

### Potential Wind Turbine Feasibility?

- ☐ High
- ☐ Medium
- ☐ Low
- ☐ Not Suitable

## Measurement & Verification

Plan for ongoing energy consumption tracking and analysis.

### Baseline Energy Consumption (kWh)

Enter a number...

### Post-Implementation Energy Consumption (kWh)

Enter a number...

### Percentage Reduction in Energy Consumption (%)

Enter a number...

### Date of Baseline Measurement

Enter date...

### Date of Post-Implementation Measurement

Enter date...

### Notes on Measurement Methodology

Write something...

### Measurement Standard Used (e.g., IPMVP)

- ☐ IPMVP
- ☐ ISO 50001
- ☐ Other

## Cost Savings & ROI Analysis

Estimate potential cost savings and calculate return on investment for recommended improvements.

### Estimated Annual Energy Cost Savings (\$)

Enter a number...

### Estimated Implementation Cost (\$)

Enter a number...

### Estimated Payback Period (Years)

Enter a number...

**Discount Rate (%)**

Enter a number...

**Financing Options Considered**

- ☐ Internal Funds
- ☐ Loan
- ☐ Grant
- ☐ Lease

**Assumptions & Calculations Notes**

Write something...

**Sensitivity Analysis Performed?**

- ☐ Yes
- ☐ No

**Date of ROI Calculation**

Enter date...