



# Energy Consumption Reduction Checklist Template

## Baseline Data Collection

Gather initial energy consumption data for comparison and tracking progress.

**Total Monthly Electricity Consumption (kWh)**

**Total Monthly Natural Gas Consumption (therms)**

**Total Monthly Water Consumption (gallons)**

**Date of Baseline Measurement**

**Average Daily Temperature During Measurement Period (°F/°C)**

### Notes on measurement conditions or unusual circumstances

Write something...

## Building Envelope Assessment

Evaluate insulation, windows, and doors for heat loss/gain.

### Wall R-Value (Existing)

Enter a number...

### Wall R-Value (Recommended)

Enter a number...

### Window Type (Existing)

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

### Door Condition

- ☐ Good
- ☐ Fair
- ☐ Poor

### Air Leakage (CFM)

Enter a number...

### Notes on Envelope Condition

Write something...

## HVAC System Efficiency

Check for leaks, proper maintenance, and optimal settings of heating, ventilation, and air conditioning systems.

### Supply Air Temperature (°C)

Enter a number...

### Return Air Temperature (°C)

Enter a number...

### Chilled Water Supply Temperature (°C)

Enter a number...

### Delta T ( $\Delta T$ ) Across Chiller (°C)

Enter a number...

### Filter Condition

- ☐ Clean
- ☐ Slightly Dirty
- ☐ Dirty
- ☐ Very Dirty

### Refrigerant Leak Check Result

- ☐ No Leak Detected
- ☐ Minor Leak Detected
- ☐ Major Leak Detected

### Last Maintenance Date

Enter date...

### Notes/Observations

Write something...

## Lighting Optimization

Assess lighting usage, identify opportunities for LED upgrades and motion sensors.

### Number of Incandescent Bulbs Replaced with LEDs

Enter a number...

### Wattage of Existing Bulbs (Average)

Enter a number...

### Wattage of New LED Bulbs (Average)

Enter a number...

### Motion Sensor Installation Status

- ☐ Not Installed
- ☐ Partially Installed
- ☐ Fully Installed

### Lighting Control Measures Implemented

- ☐ Dimming
- ☐ Scheduling
- ☐ Occupancy Sensors
- ☐ Daylight Harvesting

### Date of Last Lighting System Audit

Enter date...

### Lighting System Diagram/Layout (Optional)

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## Equipment Efficiency

Review energy usage of appliances, machinery, and other equipment; prioritize replacements with energy-efficient models.

### Equipment Energy Consumption (kWh)

Enter a number...

### Equipment Age (Years)

- ☐ 0-5
- ☐ 6-10
- ☐ 11-15
- ☐ 16+

### Equipment Capacity (kW)

Enter a number...

### Energy Star Rating (if applicable)

- ☐ Tier 1
- ☐ Tier 2
- ☐ Tier 3
- ☐ Not Applicable

### Notes on Equipment Condition

Write something...

## Equipment Efficiency Documentation (e.g., datasheet)

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# Behavioral Changes

Implement employee training and awareness programs to promote energy-saving habits.

## Employee Training Program Description

Write something...

## Number of Employees Trained (Last Month)

Enter a number...

## Topics Covered in Training (Check all that apply)

- ☐ Energy Conservation Best Practices
- ☐ Proper Equipment Usage
- ☐ Lighting Optimization
- ☐ HVAC System Awareness
- ☐ Reporting Energy Waste

## Date of Last Training Session

Enter date...

### Employee Feedback on Training Effectiveness (Scale of 1-5)

- ☐ 1 - Very Ineffective
- ☐ 2 - Ineffective
- ☐ 3 - Neutral
- ☐ 4 - Effective
- ☐ 5 - Very Effective

### Supporting Documentation (Training Materials, Sign-in Sheets)

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## Renewable Energy Options

Explore feasibility of solar, wind, or other renewable energy sources.

### Preferred Renewable Energy Source

- ☐ Solar PV
- ☐ Wind Power
- ☐ Geothermal
- ☐ Biomass
- ☐ Hydroelectric
- ☐ Other

### Estimated System Size (kW)

Enter a number...



### Initial Feasibility Study Findings

Write something...

### Target Installation Date

Enter date...

### Estimated Annual Energy Production (kWh)

Enter a number...

### Financing Method

- ☐ Self-Funded
- ☐ Loan
- ☐ Grant
- ☐ Lease
- ☐ Power Purchase Agreement (PPA)

### Supporting Documents (e.g., Site Assessment)

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## Monitoring & Reporting

Establish a system for ongoing monitoring of energy consumption and regular reporting of progress.

### Total Energy Consumption (kWh)

### Baseline Energy Consumption (kWh)

### Energy Savings (kWh)

### Percentage Reduction in Energy Consumption

### Reporting Date

### Summary of Findings and Recommendations

### Supporting Documents (e.g., meter readings, invoices)

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### Reporting Status

- ☐ Complete
- ☐ In Progress
- ☐ Needs Revision

## Maintenance Schedules

Review and update maintenance schedules to ensure optimal equipment performance and energy efficiency.

### Last HVAC System Tune-Up

### Lighting Fixture Cleaning Frequency (Months)

### Next Boiler Inspection Date

### Cooling Tower Water Treatment Type

- ☐ Chemical Treatment
- ☐ Electro-Chemical
- ☐ None

### Last Transformer Oil Analysis

### Motor Vibration Analysis Frequency (Months)

Enter a number...

## Demand Response Program Compliance

Verify adherence to demand response program requirements, if applicable.

### Participation Status

- ☐ Active Participant
- ☐ Inactive Participant
- ☐ Pending Enrollment

### Maximum Curtailment Limit (kW)

Enter a number...

### Last DR Event Date

Enter date...

### Percentage of Load Curtailment Achieved (Last Event)

Enter a number...

### Communication Method with DR Coordinator

- ☐ Automated System
- ☐ Phone Call
- ☐ Email

**Notes on Recent DR Events**

Write something...