Energy waste hunt toolkit

This three-phase PDF series is your practical guide to spotting energy waste and taking action.

1 Plan your energy hunt
Choose your focus, engage your team and get logistics in place

2 Conduct your hunt
Get your team ready and lead the walkthrough to spot energy waste

3 Debrief and follow up
Review findings, decide what to act on and keep the momentum going

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Meet Javier and Sophia, two energy managers tackling energy waste in different settings. As you work through this toolkit you will learn what to do, when to do it and how to use the right tools with real-world examples from their journeys.

Each PDF is practical and packed with:

- Clear instructions for each step
- Templates and tools you can use right away
- Tips and examples to guide your team to action

Whether it is your first energy hunt or your fifth, this toolkit will help you make it count.

Javier (industrial)

Sophia (commercial)

How to navigate this PDF:

- Use the **bookmarks panel** (on the right side) to jump between sections
- **Click** the download button to access tools and templates
- **Reveal** case examples from Javier and Sophia by clicking their images
- At the end of each PDF, you will find:
  - A quick **recapitulation checklist**
  - A **"what's next"** section to guide you into the next phase of your energy hunt

This toolkit works best on a desktop or tablet, but you can also print or use the tools digitally. If you are using it for the first time, we recommend reviewing all three PDFs in order. Some actions, such as designing the preparatory session or scheduling the debrief session, are introduced in the first PDF but explained in more detail later. Reading the full toolkit first will give you the complete picture.

Phase two overview

1 Plan the hunt

2 Prepare participants

3 Conduct the walkthrough

4 Debrief and prioritize

5 Follow up and act

Phase one

This phase covers step two and step three of the energy hunt process

Phase three

Why this phase matters

Even the best-laid plans fall flat if participants do not feel prepared. That is why preparation is just as important as the walkthrough itself.

A well-prepped team will:

- Know what to look for
- Document findings clearly
- Understand how to stay safe
- Feel confident and included

That leads to better observations and more impact.

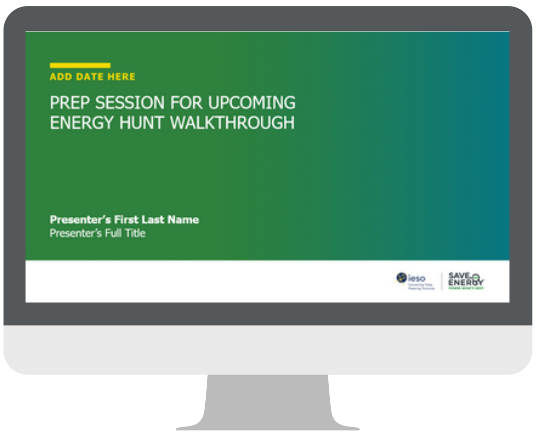
What you do in this phase:

- Lead a short preparatory session to orient your team
- Share types of energy waste to spark observations
- Provide guidance on how to document findings
- Conduct the walkthrough and identify opportunities

Prepare your team

By now, you have planned your preparatory session, including when and how it will occur, and shared logistics with participants. Now, it is time to make it happen.

The preparatory session is the bridge between planning and action. If done well, it sets the tone and ensures your team is ready to spot and document opportunities during the walkthrough. You can run it in person or virtually, either on the same day as the walkthrough or a few days before.



Use the **preparatory session slide deck template** to guide your delivery. It includes talking points and visuals to help:

- Explain why the energy hunt matters and what success looks like
- Introduce the nine types of energy waste to spark observations
- Share energy data such as demand profiles or significant energy users
- Cover respectful conduct, safety reminders and clear documentation

Preparatory session slide deck template

Your goal is to help participants:

- Understand what an energy hunt is and how they are contributing
- Learn what to look for (energy waste) and how to recognize it
- Feel confident asking questions and sharing insights
- Know how to conduct the hunt safely and clearly document what they find
- Understand their team role, route and timing

Later in this PDF, you will find two resources, the **walkthrough reference sheet** and **opportunity tracking sheet**. These tools are designed for the walkthrough, but since the preparatory session covers the same topics, you may choose to share these two resources with your team in advance.

a. Use data to guide your walkthrough

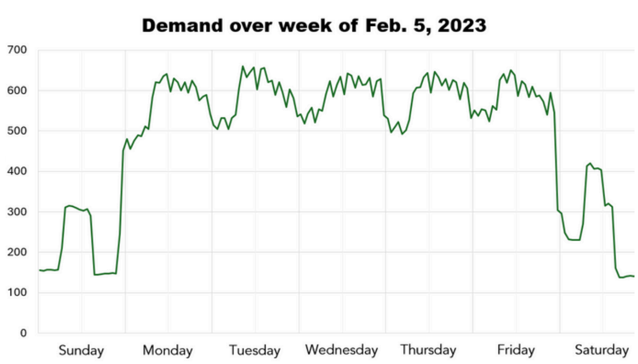
As part of your preparatory session, consider reviewing energy data in advance. It can help point your team toward areas worth investigating during the walkthrough.

Consider:

- Reviewing a weekly demand profile to spot unexpected usage spikes
- Looking at significant energy users (SEUs) identified in your facility
- Using data from your building automation system (BAS) or submeters

Sample discussion using weekly demand data

Before showing your team the chart, ask your team: “What do you think our electricity demand looks like over a typical week?” Then show the data and ask: “What stands out to you?”



Key things to notice:

- **Weeknight demand stays high:** Are systems that could be turned off left on overnight?
- **Weekend spikes:** We are closed, so what is causing the bumps?
- **Inconsistent baseload:** Overnight demand ranges from 140 to 240 kW. Can shutdowns be improved?

This exercise helps your team connect what they see in the data to what they will observe on the walkthrough.

Want to see how others used data to guide their walkthroughs?

Click on the image of Javier to review a real-world example.

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b. Help your team spot energy waste

Before heading into the field, help participants start thinking like energy detectives.

Introduce the nine types of energy waste using examples that are relevant to your facility. These categories provide structure to what people are looking for and help them connect what they see to practical improvements.

Nine types of waste:

- **Unnecessary running or idling:** Equipment left on when not needed
- **Leaks:** Loss of air, water, steam, or heat
- **Friction loss:** Restricted flow from dirt or blockages
- **Sub-optimal efficiency:** Using more energy than needed
- **Malfunctions:** Broken or poorly working equipment
- **System imbalance:** Systems working harder than necessary
- **Misapplication:** Using the wrong tool for the job
- **Underutilization:** Equipment not used to full potential
- **Traditional lean waste:** Rework, delays, or excess handling




The purpose of introducing these types of waste before the walkthrough is to spark insight early. By the time participants step into the facility, they will already have a mental checklist of what to look for. Remember, the purpose of these categories is to help generate ideas; it is not important whether a particular waste fits neatly into one category or another. Keep the session conversational. Encourage questions, stories and examples from the group.

Additional tips to help your team spot waste

Use your senses: Look for lights or equipment running unnecessarily, listen for noisy or leaking systems and feel (safely) for excessive heat, vibration or drafts.

Talk to staff in the space: People working closest to the systems often notice problems first, especially comfort-related complaints, such as "It is always hot in here" or "That fan never turns off."

Use checklists to guide your walkthrough: If you have a checklist, use it to focus team observations. However, do not let it limit their curiosity, it is a prompt, not a prescription.

Connect back to early insights: If you reviewed demand profiles or significant energy users during planning, remind teams what to look for based on that data.

The **walkthrough reference sheet** helps participants confidently spot and document energy waste during the walkthrough. It includes examples of what to look for, questions to ask and reminders to stay safe and respectful in the space.

Use this sheet to:

- Spark observations based on the nine types of waste
- Follow safe practices while walking through the site
- Ask thoughtful questions to uncover root causes
- Record meaningful details that support follow-up

Walkthrough reference sheet (industrial)

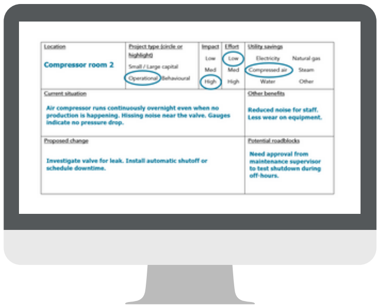
Walkthrough reference sheet (commercial)

c. Show your team how to document their findings

Clear documentation turns observations into action. During the preparatory session, review an example from the tracking sheet so participants know what to record.

The **opportunity tracking sheet** is designed to capture anything that seems wasteful. Even small, clearly recorded observations can lead to meaningful savings. Some organizations use detailed sheets to collect nameplate and operational data to estimate savings. This version keeps it simple and helps participants focus on identifying opportunities. Use the level of detail that fits your needs.

You are not just collecting data; you are laying the groundwork for action.


Location
Compressor room 2
Project type (circle or highlight)
Small / Large capital
Operational Behavioural
Impact
Low Med High
Effort
Low Med High
Utility savings
Electricity Natural gas
Compressed air Steam
Water Other
Current situation
Air compressor runs continuously overnight even when no production is happening. Hissing noise near the valve. Gauges indicate no pressure drop.
Other benefits
Reduced noise for staff. Less wear on equipment.
Proposed change
Investigate valve for leak. Install automatic shutoff or schedule downtime.
Potential roadblocks
Need approval from maintenance supervisor to test shutdown during off-hours.

Ensure they know how to:

- Describe the issue clearly and briefly
- Include location, equipment (nameplate details, if available) or system involved
- Flag missing data for follow up
- Snap a photo if appropriate
- Hand in or upload notes after the walkthrough

Opportunity tracking sheet

d. Ensure safety compliance

As part of preparing your team, go over basic safety concerns before the walkthrough begins:

- Wear required personal protective equipment (PPE) at all times
- Stay alert in high-traffic or equipment areas
- Stick to designated walkways
- Do not touch equipment unless authorized
- Stop to write notes; do not do so while walking
- Follow instructions from your group leader
- Share any other site-specific safety considerations

A quick safety reminder builds trust and ensures everyone stays focused and protected during the hunt.

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Conduct the walkthrough

Now, it is time to conduct your hunt. This may occur immediately after the preparatory session or a bit later, especially if the preparatory session was held remotely or the walkthrough is scheduled outside operating hours.

Before your hunt, take a few minutes to make sure everyone is clear on the details:

Set the purpose
Explain that this is not an inspection; it is a team effort to spot energy waste and contribute real ideas

Clarify team roles
Let participants know who they will walk with and who is leading each group.

Share the route
Provide a quick overview of which areas each team will cover and any checkpoints or priorities

Review the schedule
Share start and end times, how long the walkthrough will take and when everyone will regroup.

Confirm what to bring
PPE, the opportunity tracking sheet, the walkthrough reference sheet, etc.

Remind where to meet
Clearly state where the walkthrough starts and ends

Even the same type of energy waste can look different by setting. Help your team spot patterns, not just memorize categories.

Curious what others found during their walkthroughs?

Click on the image of Javier or Sophia to see how the same types of waste looked in their industrial and commercial facilities.

Phase two checklist

Use this checklist to confirm you have completed the key steps for preparing your team and conducting the hunt.

- [ ] Preparatory session delivered
- [ ] Participants understand their role
- [ ] Teams assigned and routes clarified
- [ ] PPE and tools ready
- [ ] Opportunity tracking sheet distributed
- [ ] Walkthrough reference sheet distributed
- [ ] Safety protocols reviewed
- [ ] Opportunities documented clearly and collected

This checklist confirms you are ready to move on to the next phase, debriefing your findings and deciding on what to act.

What's next

Your team have gathered valuable insights during the walkthrough. Now it is time to turn the findings into action. In the next PDF, you will run a simple but powerful debrief session, prioritize findings using a clear framework and track progress and follow up.

Phase three: Debrief and follow up

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