OpsPilot

Energy Audit — User Manual

Efficiency Opportunities & Quick Wins · AI Engineering Co-Pilot

What this guide covers — what an energy audit is, how the OpsPilot module runs one, what to have ready, and the opportunity register you receive.

1. What is an energy audit?

An energy audit finds where a facility's energy (and money) is going, and where it's being wasted — then turns that into a prioritised list of actions, from no-cost quick wins to capital projects, each with an estimated saving and payback. It replaces “we should use less energy” with “fix these five things, in this order, for this return.”

2. What the OpsPilot module does

Role	Responsibility
🎯 **AI Coach (OpsPilot)**	Guides a systematic audit — establishing the baseline, mapping the major energy systems, identifying efficiency opportunities with estimated savings and payback, and building a prioritised action plan from quick wins to capital projects.
👷 **Engineering / Operations Lead (you)**	Provide the energy bills, metering data and operational context — you know which systems are the biggest consumers and where the known inefficiencies are.

3. How it works — the process

#	Stage
1	Facility description and audit objective
2	Energy baseline — 12 months of consumption and cost
3	Energy system mapping — major consumers and their share
4	Opportunity identification — compressed air, motors, heating, lighting, leaks
5	Opportunity ranking — savings, cost and payback
6	Action plan — quick wins, capital projects, study items
7	Word report

4. What you will be asked — have this ready

- The facility — the process, site size and main energy-consuming systems.
- Twelve months of energy consumption and cost (the baseline).
- Metering data where you have it, and the known inefficiencies.

5. What you receive — the output

An Energy Audit and Opportunity Register (Word): the baseline, the energy-system map showing the major consumers and their share, the identified opportunities with estimated savings and payback, and a prioritised action plan separating quick wins from capital projects and study items.

6. Worked example (illustrative)

The baseline and system map show compressed air is a major consumer — and a leak survey finds the system is losing a third of its output through leaks running 24/7. That's a quick win: fixing leaks costs little and pays back in weeks, so it goes to the top. A variable-speed-drive retrofit on the main supply fans saves more in absolute terms but is a capital project with a longer payback, so it's ranked accordingly. A heat-recovery idea that needs more data becomes a study item. The register gives the site a sequence — do the cheap, fast paybacks first to fund the bigger ones.

7. Getting the best result

- **Baseline first.** You can't prove a saving without a starting point — twelve months of data.
- **Map the big consumers.** A small share of systems uses most of the energy — start there.
- **Rank by payback.** The biggest absolute saving isn't always the best first move.
- **Separate quick wins from capital.** No-cost fixes build momentum and fund the larger projects.