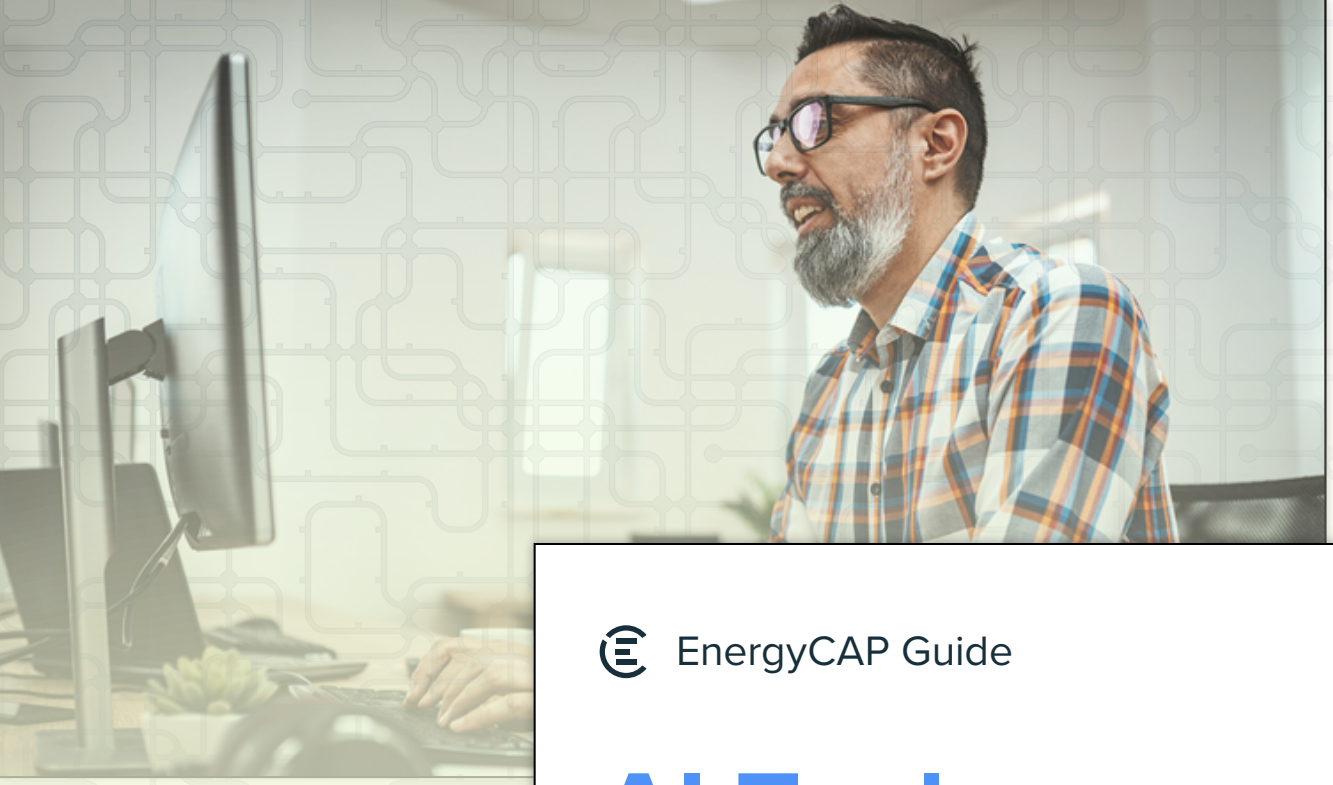

EnergyCAP Guide

AI Tools for Energy Professionals

Prompts and Use Cases

ENERGYCAP

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Executive summary

This AI Prompt Guide is a practical toolkit developed to supply energy, sustainability, and finance teams with immediate, actionable ways to integrate AI into their daily workflows. Tailored to support real-world energy management tasks, this guide serves as a prompting playbook, a reference library, and an experimentation toolset rolled into one.

WHAT'S INSIDE

- **Prompting playbook**
  Learn the six core elements of every high-impact prompt—role, goal, context, data, behavior, and output. Master these to give your AI precise direction.
- **15 ready-to-use prompts**
  Pre-configured templates address common energy challenges across compliance, tariffs, baselines, financial memos, M&V explanations, behavioral nudges, and risk reporting.
- **Power-ups and enhancements**
  Includes guidance on enhancing response accuracy and speed through retrieval hacks, voice commands, auto-scheduling, CSV integration, and iteration strategies.

BUILT FOR EXPERIMENTATION

AI performs best when it understands your environment. This guide emphasizes adaptability and ease-of-use:

- **Easy to modify**
  Every prompt is structured for easy tailoring to specific institutions, datasets, and operational nuances.
- **Real workflows**
  Designed with direct compatibility with EnergyCAP exports such as utility bills, cost-avoidance charts, and heatmaps.
- **Data-driven**
  Encourages deep integration of real, institution-specific data (ZIP codes, project metrics, tariff rates, etc.) to generate high-fidelity outputs.

Prompting playbook

Core anatomy of every effective prompt.

Role: Tell your model what it is supposed to be doing. Direct it on its expertise and tone.

"You are an energy-policy analyst."

Goal: Provide an overview of what you are looking to accomplish with the prompt."

"Deliver a table of every climate rule for ZIP 12345."

Context: Give your model contextual details to help eliminate incorrect assumptions.

Campus type, stakeholders, timeline, constraints. More is better.

Data: Feed the model as much information as you can. This can be in the format of file uploads, copy and paste text and images, URLs to websites you're referencing etc.

Paste PDFs, CSVs, Excel, photos, screenshots, and exports from tools like EnergyCAP.

Behavior: Set the AI up to help you on your terms.

Describe how the AI should think, its tone, if it should ask you questions, etc.

Output: A direct request of what you want the AI to generate.

"Markdown table," "200-word email," "JSON array." Be specific.

Iterate: Provide critique to the AI or additional context and direction to improve its output.

"Improve clarity." "Add risks." "Fit on one slide."

PRO TIP

Centralize your data in a platform like EnergyCAP to make it easy to pull accurate, audited, and complete context quickly to set your AI up for success as you prompt.

Prompt power-ups

Add-ons that boost answer quality or speed.

ANSWER QUALITY

If you want to refine your AI's output and improve it's responses, here are some tactics and examples you can apply:

- **Use thinking models:** Newer models iterate internally before answering to improve quality.
- **Ask-me-questions:** Instruct the AI to ask YOU questions that will help it give a better answer.
- **Retrieval hack:** Attach PDFs/CSVs directly to add context and facts quickly.
- **Ask for the best guess:** Some data is hard to find; ask the AI to find it online or make a guess.
- **Get help prompting:** Ask the AI to help you improve your prompts.

WORKFLOW SPEED

As you start to use AI more regularly, think about how you can speed up your work efficiency in your ways of working such as:

- **Voice prompt:** Speak complex context instead of typing.
- **Collaborate in docs:** Use built in text editors (Canvas on OpenAI or Artifacts in Claude).
- **Projects:** Most AIs let you group prompts into projects.
- **Custom GPTs:** Encapsulate prompts and data for quicker access.
- **Scheduling:** Pair a prompt with a weekly reminder.

Start with one power-up; stack when you need more precision.

Compliance compass

Know every rule and rebate before coffee.

Rules and money shift daily. This prompt builds a cheat-sheet of every climate regulation and incentive for your ZIP. Grab your ZIP and, if you have it, an EnergyCAP export of current incentives.

Role: Higher-ed energy-policy analyst

Goal: Table of every climate rule, mandate, grant, and rebate for ZIP {{ZIP}}

Context: Four-year public university, 3 M ft^2, labs + classrooms

Data: [Public sources (DSIRE, EPA, ASHRAE, state sites)]

Behavior:

- Separate “Must Comply” and “Optional Incentive”
- Add compliance date, agency, max dollars
- Notes ≤40 words

Output: Markdown table ready for a slide

POWER UPS

- Swap ZIP for county to widen scope.
- Add “Campus Readiness Score 1–5.”
- Schedule to rerun quarterly; rules update ~90 days.

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Tariff tuner

Slash bills by picking the best demand-based tariff.

Peak-demand tariffs can swing millions. Feed 12 months of kWh, kW peak, and current tariff; get the best alternatives. Export these numbers from EnergyCAP if you track bills there. Works only for meters on demand-based rates.

Role: Utility-rate analyst

Goal: Identify the lowest-cost tariff per meter

Context: [My organization], 4 main meters at the site, TOU rates available, we work with [Utility Vendor]

Data: [CSV with: Month, kWh, kW_peak, current tariff code]

Behavior:

- Use search to look up relevant tariffs
- Calculate annual cost under current and two cheaper tariffs
- State demand, ratchet, rider assumptions
- Flag penalties for switching
- If kW_peak unknown, estimate 0.9 × billed demand

Output: Summary table + 150-word recommendation

POWER UPS

- Ask the AI for a ±10 % load sensitivity.
- Ask for a monthly-cost chart description.
- Ask for the financial impact if a 500 kWh battery storage unit is installed.
- Schedule to rerun quarterly; tariffs change often.

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Baseline builder

Lock in a weather-normalized EUI for each building.

Need an EUI but lack a clean building list? ChatGPT can scrape public sources to list every building and square footage, then merge with your EnergyCAP export of kBtu, HDD, and CDD to create a weather-normal baseline. Verify scraped areas before use.

Role: Energy benchmarking specialist

Goal: Produce weather-normalized EUI per building

Context: [My organization]. We have with offices, garages, admin spaces

Data:

- Use search to compile a list of Buildings and GSF from public records
- [Table of kBtu/month, HDD, CDD (EnergyCAP export or NOAA)]

Behavior:

- Use 60 °F base
- Return EUI and 12-month trend slope
- Flag any $R^2 < 0.7$

Output: CSV + one-sentence alert for outliers

- CSV of EUI values + one-sentence alert for outliers
- Include building you found online for every building

POWER UPS

- Do a quick check on any data scraped from the internet.
- Ask the AI for an ENERGY STAR score estimate.
- Ask the AI to add peer percentile using CBECS medians.
- Load the scraped building attribute data into EnergyCAP for faster analysis in the future.

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Cashflow commander

Turn project numbers into a stakeholder-ready memo.

Decision-makers trust cash. Feed project cost, savings, and terms; get a two-page memo with payback metrics and a cash-flow chart.

Role: Capital-project financial analyst

Goal: Draft an investment memo for a lighting retrofit

Context: 400 k ft^2 academic building in [my state].

Data:

- CAPEX $1.2 M
- Annual energy savings $220k
- Maintenance savings $30k
- Discount rate 5%
- Life 15 y

Behavior:

- Show cash-flow table, NPV, IRR, payback
- ≤500 words, plain English
- Finish with a recommendation

Output: Two-page Word-ready text

POWER UPS

- Ask the AI to add avoided-carbon dollars.
- Pull the post-retrofit tariff from Tariff Tuner (above).
- Ask the AI what questions it thinks stakeholders would have (and how you should answer).

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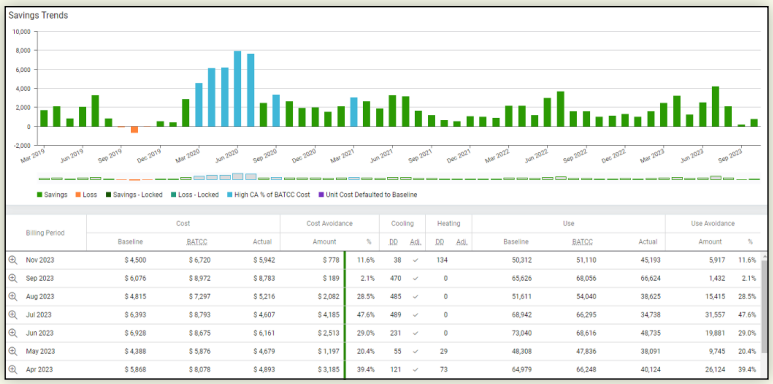
M&V explainer

Translate cost-avoidance charts for managers.

Managers see lines; you see avoided cost. While energy managers love the detail in an M&V chart, it's not always easy to translate that for managers. For this prompt, paste in an EnergyCAP M&V screenshot from a recent project. The prompt explains cost avoidance versus raw savings in plain English.



Role: M&V educator certified in M&V best practices

Goal: Explain the attached M&V chart to a non-technical manager

Context: Baseline Jan–Dec 2024; tariff change July 2024

Data:

- [Screenshot of EnergyCAP cost-avoidance plot]
- [Details of the project that might be relevant]

Behavior:

- Define acronyms (HDD, CDD) and cost avoidance vs total savings
- Call out HDD, CDD, occupancy, tariff factors
- ≤250 words; use bullets

Output: Email-ready brief for administrators

POWER UPS

- Ask it to explain M&V best practices and assumptions it made.
- Ask it what your manager might think of the email.
- Ask for a "What could go wrong" box to show you're thinking of everything.

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Greenlight calculator

Nail payback, NPV, IRR for any time horizon.

Finance needs answers fast, but you forgot some of your finance formulas. The prompt will ask you for cash in, cash out, and discount rate for each of the next few years, then return payback, NPV, and IRR.

Role: Finance partner

Goal: Calculate payback, NPV, and IRR for a chiller project

Context: Capital review next week

Data: Ask me:

- "Provide Year, Cash_In, Cash_Out, Discount_Rate for the last few years."

Behavior:

- Ask me questions one at a time so I can answer
- After data received, build table
- Highlight any year with negative cumulative cash post-payback
- Limit commentary to three bullets

Output: Table + bullets

POWER UPS

- Send a CSV to skip Q&A if you've got it, or ask for a CSV based on your answers.
- Ask if the local utility companies offer any rebates to incentivize the project.
- Ask the AI to flag if IRR is less hurdle rate.
- Ask the AI to use search to find details you might be missing about hurdle rates.

Scenario sandbox

Frame price-shock stories leaders remember.

Budget shocks hurt. Feed last year's use and rates; get three risk stories at ±10%, 20%, 30%. Include context on any expected changes from last year to this year. Go further by estimating more realistic scenarios.

Role: Budget-risk advisor

Goal: Model utility spend under three price shocks

Context: Fiscal-year planning July–June, [zip code]

Data: [table of Commodity, Annual_Use, Current_Rate]

Behavior:

- Scenarios +10 %, +20 %, +30 % on all commodities
- Return bar-chart description
- Provide 1-paragraph narrative per scenario

Output: Markdown chart description + narratives

POWER UPS

- Ask the AI to project the most likely scenarios instead of using fixed percentages.
- Ask the AI to include weather data based on your zip code or climate zone.
- Ask the AI to use search to understand other changes affecting your organization.
- Link risk to Compliance Compass deadlines.

Report whisperer

Shrink dense reports into action-driving emails.

Tech reports scare VPs, but sometimes they DO need to be in the loop. Paste the full PDF; get a 200-word pitch they will read. You can even build a VP-friendly FAQ!

Role: Senior communications officer

Goal: Rewrite a technical study as an email to the finance VP

Context: Asking for approval of HVAC retrofit funding

Data: [Full PDF of the study]

Behavior:

- Plain language, active voice
- Max 200 words
- Include a “Call-to-Action” section urging approval

Output: Email draft

POWER UPS

- Ask the AI to provide three tone variants: executive, friendly, technical.
- Ask the AI to supply 50-character subject-line A/B/C.
- Ask the AI to generate a set of 20 questions your VP might ask with short answers to each.

Audit scope scribe

Draft a procurement-ready ASHRAE II scope.

RFPs drain hours. Give counts, footage, and focus; get an ASHRAE II scope ready for procurement. You can even feed in past RFPs for style!

Role: Facilities procurement writer

Goal: Draft scope for a Level II energy audit

Context: 5 buildings, 1960-1990, labs + classrooms

Data:

- [Building list with GSF; audit goals (lighting, HVAC, controls)]
- Past RFPs that worked well]

Behavior:

- Provide deliverables, timeline, data-access needs
- Include cybersecurity and data-sharing requirements
- Numbered sections; ≤500 words
- Follow the format and style of the input pdf

Output: Scope text

POWER UPS

- Ask the AI to add optional retro-commissioning.
- Ask the AI to insert a safety clause.
- Ask the AI to include an ask for bidder-evaluation rubric.

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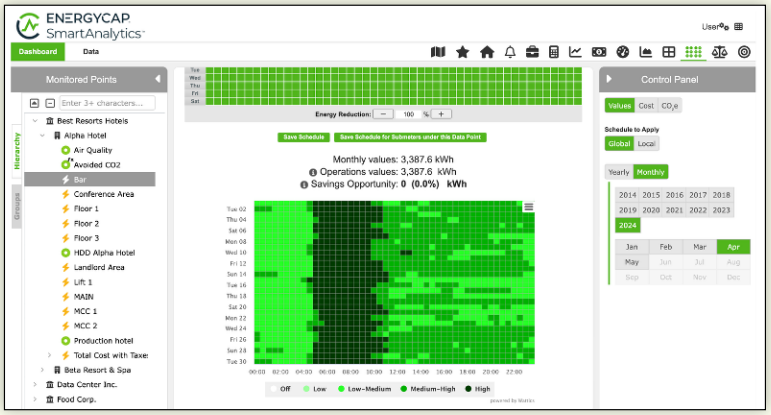
Heatmap sleuth

Spot and explain load spikes fast.

Find the spike before Finance!

Feed in your interval data to look for unusual behavior—and help you think of reasons why it might be happening.



Role: Expensive energy analysis consultant

Goal: Explain demand spikes in the attached heatmap

Context: Interval data for a coffee bar

Data: PNG heatmap for one month

Behavior:

- Flag spikes >20 % above daily average
- Flag anything that seems suspicious or unusual
- Suggest three likely causes each
- Recommend next diagnostic step

Output: Bulleted list ≤300 words

POWER UPS

- Ask for an email to maintenance on the top few issues.
- Request the impact of fixing identified issues in cost and carbon.
- Combine with Tariff Tuner for peak-shave savings opportunities.

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Nudge factory

Ship weekly occupant nudges by email + SMS.

Behavior change thrives on consistency. Schedule this prompt weekly—AI will craft concise and engaging messages to encourage smarter energy use across your organization.

Role: Sustainability Communications Lead

Goal: Draft next week's plug-load message

Context: Office buildings up 5% last week

Data: [Last week's email + new plug-load chart link]

Behavior:

- Friendly tone, 150 words, one clear call-to-action
- Reference last week's result
- Suggest one new tip in the email
- Produce both an email and a 160-character SMS

Output: Email draft + SMS + 3 subject line ideas

POWER UPS

- Pair with a Monday calendar trigger.
- Ask the AI to add a clever caption for signage.
- Ask for a funny picture or illustration to go with the email.
- Request Spanish translation as well.

Risk reporter

Rank backlog items by energy and reliability risk.

Deferred fixes drain budgets. Feed in the backlog list for your projects and get ranked plan of where to prioritize next. Let the AI fill in the gaps if you haven't fully fleshed out each project yet!

Role: Capital-planning advisor

Goal: Rank maintenance backlog by energy and reliability risk

Context: [minutes or transcript from your annual capital allocation meeting]

Data: [CSV of Item, Cost, Energy_Impact 1-5, Reliability_Risk 1–5]

Behavior:

- Estimate the cost, energy impact, and risk of any blank rows
- Before you start, flag rows with suspicious cost, impact, or risk scores
- Assign a priority score to each item
- Flag any single-point-of-failure items

Output: Ranked table of all items + 100-word summary of top 3 priorities

POWER UPS

- Ask the AI to explain why it might disagree with any of your input estimates.
- Ask for an hours-to-complete and days-to-complete estimate for each item.
- Ask the AI to add a section for "quick wins < $50k."
- Link scores to Compliance Compass mandates.

About EnergyCAP

EnergyCAP is a purpose-built energy management SaaS platform that centralizes your energy and utility data, captures decision-ready insights, saves time, and controls costs. Backed by more than four decades of industry experience, the platform unifies granular information—from utility bills and meters to sensors—into a single source of truth that surfaces meaningful savings opportunities. Thousands of government agencies, universities, and private companies rely on EnergyCAP to streamline utility bill management, forecast budgets with confidence, and accelerate their energy reduction goals—giving finance, energy and sustainability leaders the clarity they need to act with confidence and capture measurable savings.

HAVE A COOL PROMPT? Join the **Eco Champions Community** and let us know!

WANT TO LEARN MORE? **Get in touch** or **visit our website**.

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