

strata

ENERGY FORECAST

ISO 50001 Analytical Readiness Checklist

25 diagnostic questions across the 5 most data-intensive clauses of ISO 50001. Score your current capabilities, identify gaps, and see where analytical depth can turn compliance into a competitive advantage.

jetpack.ai/strata | For energy managers at sites consuming >10 TJ/year

How to use this checklist

This checklist covers the five ISO 50001 clauses where analytical capability matters most. For each question, score yourself honestly:

- ✓ **Yes** You have this capability in place and can demonstrate it to an auditor.
- **Partial** You have something, but it is manual, inconsistent, or would not survive audit scrutiny.
- ✗ **No** This capability does not exist or is based on assumptions rather than data.

Each section maps to a specific ISO 50001 clause. The hint text below each question explains what auditors typically look for and why it matters for your energy performance, not just compliance.

Scoring summary

20–25 Yes: Strong analytical foundation. Strata can accelerate what you already do well.

10–19 Yes: Solid start, but gaps in normalisation, forecasting, or scenario modelling will limit both audit confidence and financial value.

<10 Yes: Significant analytical gaps. Addressing these before your certification audit will save time and unlock the ROI the standard is designed to deliver.

SECTION 01

Energy Review and Significant Energy Users

ISO 50001 Clause 6.3 — Energy Review

01.1 Do you have a systematic method for identifying your significant energy users (SEUs)?

Not just listing big consumers. The standard requires criteria-based identification with documented rationale.

Yes Partial No

01.2 Can you quantify each SEU's share of total consumption with current data, not estimates?

Auditors will ask for evidence, not engineering judgements from three years ago.

Yes Partial No

01.3 Do you track the relevant variables (weather, occupancy, production volume) that drive each SEU's consumption?

Without these, you cannot normalise baselines or explain variance.

Yes Partial No

01.4 Is your energy review updated at defined intervals, or only when someone remembers?

Continual improvement requires a repeatable, scheduled analytical process.

Yes Partial No

01.5 Can you identify energy performance improvement opportunities from your review, with quantified potential?

The review should surface actionable opportunities, not just describe the status quo.

Yes Partial No

SECTION 02

Energy Baselines

ISO 50001 Clause 6.5 — Energy Baselines (EnBs)

02.1 Are your energy baselines built on regression models that account for relevant variables?

Spreadsheet averages are not statistically valid baselines. Auditors increasingly push back on flat-line references.

Yes Partial No

02.2 Can you demonstrate that your baseline period is representative and free from anomalies?

A baseline contaminated by COVID shutdowns or equipment failures will distort every comparison.

Yes Partial No

02.3 Do you have a documented policy for when and how baselines are adjusted?

Static baselines decay. The standard requires adjustment when significant changes occur.

Yes Partial No

02.4 Can you normalise your baselines for external factors and show the methodology?

"We adjusted for weather" is not enough. The auditor wants to see the model and the R².

Yes Partial No

02.5 Do your baselines cover all significant energy users, not just site-level totals?

Site-level baselines mask offsetting changes. SEU-level baselines isolate real performance shifts.

Yes Partial No

SECTION 03

Energy Performance Indicators

ISO 50001 Clause 6.4 — Energy Performance Indicators (EnPIs)

03.1 Are your EnPIs linked to specific SEUs and their relevant variables?

Generic kWh/m² ratios often miss the factors that actually drive consumption.

Yes Partial No

03.2 Can you show a statistically meaningful improvement trend over your reporting period?

Flat or noisy EnPI trends signal that either the indicator is wrong or performance is not improving.

Yes Partial No

03.3 Do your EnPIs separate operational performance from external influences?

A cold winter should not make your EnPI look worse if your operations are unchanged.

Yes Partial No

03.4 Are your EnPIs useful for operational decision-making, or only for the auditor?

If the energy team does not use the EnPIs day to day, they are probably the wrong indicators.

Yes Partial No

03.5 Can you produce EnPI reports at management-review frequency without manual effort?

If generating reports requires a week of spreadsheet work, the frequency will slip.

Yes Partial No

SECTION 04

Monitoring, Measurement and Analysis

ISO 50001 Clause 9.1.1 — Monitoring, Measurement, Analysis and Evaluation

04.1 Do you have a monitoring plan that specifies what is measured, how often, and by what method?

The plan is not optional. It must be documented and linked to your SEUs and EnPIs.

Yes Partial No

04.2 Can you detect significant deviations from expected energy performance automatically?

Manual monthly checks miss problems for weeks. Automated anomaly detection catches them in hours.

Yes Partial No

04.3 Do you forecast future energy consumption, or only report on the past?

Forward-looking analysis surfaces revenue opportunities (demand response, peak-shaving) that backward-looking dashboards miss.

Yes Partial No

04.4 Is your measurement infrastructure calibrated and are uncertainties documented?

The standard requires you to address measurement accuracy. Uncalibrated meters undermine every analysis.

Yes Partial No

04.5 Can you trace any data point from the EnPI report back to the raw measurement?

Auditability means a clear chain from meter reading to reported performance.

Yes Partial No

SECTION 05

Management Review and Investment Decisions

ISO 50001 Clauses 9.3 and 6.6 — Management Review, Planning for Actions

05.1 Does your management review include quantified energy performance data, not just status updates?

Top management needs to see cost impact, trend direction, and forecast, not a compliance dashboard.

Yes Partial No

05.2 Can you model the financial impact of proposed energy investments before committing capital?

Rules of thumb and vendor proposals are not investment-grade analysis.

Yes Partial No

05.3 Do you evaluate scenarios (electrification, storage, load shifting) with site-specific data?

Generic payback calculators ignore your actual load profile, tariff structure, and operational constraints.

Yes Partial No

05.4 Are energy action plans prioritised by quantified cost-benefit, not just feasibility?

The standard asks for expected improvement. Quantified means modelled, not guessed.

Yes Partial No

05.5 Can the same analytics that satisfy your auditor also feed your CAPEX business cases?

If you maintain two parallel sets of analysis, you are doubling the work and halving the credibility.

Yes Partial No

What next?

If your "Partial" and "No" answers cluster around baselines, forecasting, or scenario modelling, that is exactly the analytical layer Strata is built for.

Strata delivers regression-based energy baselines, forward-looking load forecasts, and investment-grade scenario models. The same analytics that satisfy your ISO 50001 auditor also drive your energy P&L.

See how Strata works

jetpack.ai/strata

Deployed at major European airports and industrial sites.