

EcoAI Building Review & Qualification Guide

How we identify the right buildings for continuous HVAC optimisation

Business case first. Technical confidence before implementation.

The review is designed to establish whether a building offers a credible energy, carbon and commercial opportunity before either party commits significant time or resource.

Why start with a building review?

Not every building offers the same opportunity. EcoAI reviews how the building operates, the available energy data and the existing BMS infrastructure so effort is focused where continuous optimisation is most likely to deliver meaningful, measurable savings.

The objective is not to find buildings that need replacing.

It is to identify buildings where the systems already in place can perform significantly better.

What the initial review considers

Commercial opportunity Is there enough HVAC energy use and avoidable waste to create a meaningful financial case?	Existing infrastructure Is there a live BMS, suitable HVAC plant and a credible route to the data and control points required?
Measurement Is there sufficient energy data to understand current performance and verify future savings?	Operational context How is the building used, what comfort conditions matter, and are major changes or upgrades already planned?

What makes a strong candidate building?

We look for a combination of opportunity, controllability and a stable route to value.

Five characteristics matter most

1. Meaningful HVAC energy use

A sufficiently large heating, cooling or ventilation load to create a worthwhile savings opportunity.

2. Existing BMS infrastructure

A live BMS with relevant data and controllable HVAC setpoints. The BMS and existing control logic remain in place.

3. Operational opportunity

Changing schedules, weather response, occupancy patterns, setpoint drift or inconsistent control create scope for continuous optimisation.

4. Good measurement potential

Suitable meter and operating data make it possible to establish a credible baseline and verify performance.

5. A stable operating future

The building is expected to remain in use and is not about to undergo a major change that would make the current assessment obsolete.

A strong candidate is a building with a credible business case and a controllable HVAC opportunity - not simply an old or inefficient-looking building.

What information is useful at the start?

Enough to understand the opportunity - not a full technical survey.

Useful initial information

- Building name, location, use and approximate floor area
- Annual electricity and heating consumption and, where available, energy cost or unit rates
- Existing BMS make, age and BMS/controls contractor if known
- Main HVAC systems - for example AHUs, heating circuits, cooling circuits and major plant
- Typical operating hours and occupancy patterns
- Known comfort, plant or controls issues
- Planned major plant, controls or refurbishment works
- Available meter data, interval data and any existing energy reporting

You do not need to have everything before contacting us.

EcoAI can start with the information available, identify any gaps and agree what is worth confirming next. The Quick Building Information Form is designed to make this first step straightforward.

Who normally helps provide it?

Estates / FM Building use, schedules, comfort requirements, known operational issues and planned works.	Energy / sustainability Consumption data, tariffs, meter information and existing performance reporting.
BMS / controls BMS platform, system architecture, point information and likely access route.	IT / OT Relevant network, security and connectivity requirements where these need to be considered.

From initial review to Technical Validation

A clear progression from opportunity to evidence.

The Building Review journey

1. Initial information Gather available building, energy and BMS information.	2. Desktop assessment Review the indicative savings, carbon and commercial opportunity.
3. Collaborative review Confirm assumptions, identify gaps and agree whether the opportunity merits further work.	4. Technical Validation Validate BMS access, data, controls, metering, comfort requirements and deployment route.

Desktop Commercial Assessment

The desktop stage is intended to answer a simple question: is there enough evidence of a meaningful opportunity to justify Technical Validation? It uses the information available to estimate the potential commercial value and identify any obvious constraints.

Collaborative Building Opportunity Assessment

Where the opportunity is credible, EcoAI works with the client to confirm the building context, refine assumptions and establish what additional information is required. This is a shared review rather than a technical audit.

Technical Validation

Technical Validation is the point at which the proposed optimisation scope is tested in detail. The available BMS data and control points, metering, comfort requirements, operating constraints, access route and integration requirements are confirmed before implementation.

Where appropriate, optimisation can be targeted to selected HVAC systems, zones or control points rather than applied across the whole building from day one.

Technical Validation confirms the opportunity before optimisation is deployed.

It is the bridge between an attractive business case and a controlled, low-disruption implementation.

What happens after the review?

A clear recommendation, based on the evidence available.

Three possible outcomes

Proceed to Technical Validation

The commercial opportunity appears strong and there is a credible route to deployment. The next step is to confirm the technical scope and implementation requirements.

Further information required

The opportunity may be attractive, but additional energy, BMS or operational information is needed before a confident progression decision can be made.

Not currently suitable

The building does not presently offer a strong enough opportunity, or planned changes mean it is more sensible to pause and revisit later.

If the building progresses

- Deployment is planned with the client, BMS/controls and IT/OT teams as required.
- The optimisation layer is deployed remotely, with no disruption to normal building operations.
- The existing BMS, HVAC plant and underlying control logic remain in place.
- Building data is collected so the system can learn how the building behaves.
- Optimisation is introduced within agreed comfort and operational limits.
- Performance is measured and savings are verified against the agreed baseline.

The purpose of the Building Review is simple:

Identify the right buildings, establish the business case and confirm there is a credible technical route before moving forward.

Next step:

Share the available building, energy and BMS information so EcoAI can complete an initial Building Review and advise whether the opportunity merits further assessment.