Maintenance, and the Slow Return of Consumption

GUIDING QUESTION *Take the most successful energy improvement your property has made in the last five years, the one that was measured and reported. Spend four minutes answering one question about it: what has to keep happening for that saving to still be there, and is any of it written into a maintenance contract? A saving is a state, not an event, and a state that nobody maintains returns to where it came from without anybody deciding that it should.*

Property: _____ Completed by: _____ Date: _____

How to use this sheet: work through the five parts with the people who own the process. The text in the left-hand columns comes from the book; the empty columns are for what is true in your property.

1. Verification Pact: what is commonly believed, what actually holds, and your property

What is commonly believed	What actually holds	In our property
«We made that improvement, so we have it.»	An improvement is a state, not an event. A balanced circuit does not stay balanced and a clean exchanger does not stay clean.	
«Maintenance is a commercial contract.»	For several items it is the operational criterion itself, and its intervals are that criterion's values.	
«We renegotiated the contract on price.»	If an interval moved, you amended an operational criterion. Nobody costed what was traded.	
«Nothing broke, so nothing is wrong.»	Nothing has to break. Eleven per cent can walk back across two winters at a pace no single month makes visible.	
«Maintenance protects what we gained.»	It can also be a gain. Slowing an expected decline through proper maintenance controls counts as improvement under the guidance.	
«The engineer should not have moved the valve.»	He should. A cold room at ten at night needs solving. What was missing was a record and a planned return.	

2. What the standard requires, and what demonstrates it

From Table 2.7.a. The third column of the book (what is method, not requirement) is left out here: write what your property actually holds as evidence.

What is required	What demonstrates it in a hotel	In our property
Maintenance criteria for significant uses	The intervals that hold an improvement, written as criteria	
Criteria where absence would cause significant deviation	Four or five items, not the whole asset register	
Control implemented in accordance with the criteria	A contract that contains the intervals the criteria specify	
Operation of significant uses monitored	A condition recorded after an improvement, to compare against	
Actual consumption against expected	An expectation reset to the post-improvement level	
Significant deviations investigated and responded to	A record of what was found when the saving walked back	
Improvement may come from how equipment is maintained	A maintenance change proposed as an energy action	

3. The instrument: Table 2.7.b, What keeps each saving alive

The instrument of this subchapter. Complete it on the day the contractor leaves, not two winters later.

The improvement	What holds it in place	At what interval	In the contract
Hydraulic rebalancing	Nothing, unless adjustments are logged and returned	Review the log twice a year	
Heat exchanger clean	A recurring clean, not a project clean	As the contractor specifies	
Set points reviewed	A periodic check against the recorded values	Twice a year, and after complaints	
Filters and air paths	The replacement interval, unchanged	The original interval, in writing	
Control schedules	A comparison against the recorded schedule	Quarterly	
Insulation and lagging	Inspection after any work that disturbs it	After each intervention	
Any temporary adjustment	A log entry with a return date	At the moment it is made	

The rows above are the book's; the empty rows are for lines your property needs to add.

4. Common mistakes: self-check

Common mistake	Present here? (Yes / Partly / No)	Where we see it
Treating an improvement as an event rather than as a state somebody has to hold.		
Leaving a project clean out of the recurring maintenance schedule.		
Renegotiating an interval without costing the energy that was traded.		
Comparing to last year, so that the loss of a gain becomes invisible within twelve months.		
Adjusting a valve or a set point with no record and no return path.		
Shortening every interval in the building and losing the whole contract at the next review.		

5. Action plan

Step from the book / gap found	Action in our property	Owner	Deadline
Record the condition on the day the work is handed over, not only the result.			
Ask the contractor what has to keep happening: he will tell you in a minute.			
Move whatever that is into the maintenance schedule, with a frequency, in writing.			
Read the maintenance contract as operational criteria at every renegotiation.			
Reset the expectation to the post-improvement level, or the loss will be invisible.			
Give every temporary adjustment a log entry and a return date.			

Step from the book / gap found	Action in our property	Owner	Deadline
Claim the maintenance gain where you can show a decline was slowed.			
When a saving has gone, ask the four people before analysing the data.			
Put last year’s best improvement back on the agenda with one question: is it still there?			

In brief

An energy improvement is a state and not an event. A rebalanced circuit does not stay balanced, a clean exchanger does not stay clean and a correct set point does not stay correct, and all three are held in place only by somebody continuing to do something, which is usually cheap, unglamorous, and absent from every contract the property holds.

Source: The Helm and the Lens, Volume 4a: The Helm, subchapter 2.7. This sheet does not reproduce the text of the standard; work with your own copy of ISO 50001:2018 from an authorised source.