Significant Energy Uses, and the One Nobody Named

GUIDING QUESTION *Find the list of significant energy uses in your system (there will be three or four) and spend five minutes on two questions. What criterion put each of them on the list, and is that criterion written down anywhere? And for the uses that did not make the list, how was their share estimated: from a meter, or from somebody multiplying a nameplate rating by the hours they believed the machine ran?*

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
«A significant use is one of the big consumers.»	Or one offering considerable improvement potential. Either limb qualifies, and the second is where the cheap wins are.	
«Ten per cent is the usual threshold.»	The criteria are yours to determine, and therefore yours to state. A threshold nobody wrote down cannot be reviewed or applied consistently.	
«That use is too small to bother measuring.»	If the share was estimated rather than measured, the reason it is small and the reason it is unmeasured are the same reason.	
«Rated power times hours is close enough.»	It estimates the hours a machine is supposed to run. Drift, overrides and set point changes all live in the difference.	
«The significant uses are a technical annex.»	They determine where the system's attention goes for years. It is an allocation of attention and belongs in front of the owner.	
«We identified the uses; the people come later.»	For each significant use the review must determine the persons who affect it, including contracted, part-time and temporary staff.	

2. What the standard requires, and what demonstrates it

From Table 1.8.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
Analysis based on measurement and other data	A statement, use by use, of which figures were measured and which estimated	
Significant uses identified from that analysis	A list of three to six, each traceable to the criterion that put it there	
Criteria of significance determined	The criterion written in one sentence, including both limbs of the definition	
Relevant variables determined for each use	The variable named beside the use, with where its data come from	
Current performance determined for each use	A figure, and the date and method by which it was obtained	
Persons affecting each use identified	Names or roles, including contracted, part-time and seasonal staff	
Opportunities determined and prioritised	A list in an order, with the reason for the order	
Review updated at intervals and on major changes	A review date that has passed, and a note of what changed	

3. The instrument: Table 1.8.b, The candidate list, before the line is drawn

The instrument of this subchapter. Fill the second and third columns before deciding anything.

Use	Share, and how that share was obtained	Improvement potential	Who affects it
Cooling or heating	Measured or estimated: say which	High where controls are old	Engineering; whoever overrides
Domestic hot water	Usually estimated	High where circulation runs continuously	Engineering; housekeeping
Kitchens	Rarely metered separately	High where start-up times are habitual	Chefs; whoever holds the keys
Laundry, if on site	Sometimes metered	High where loads are part-filled	Housekeeping; contracted staff
Pool and spa plant	Almost always estimated	High where set points drift	Pool and spa staff, often contracted
Lighting	Estimated from inventory	Moderate after a retrofit	Everybody
Lifts and pumps	Rarely considered	Low to moderate	Service contractor
Base load, unattributed	What is left when the others are subtracted	Often the largest single opportunity	Nobody, until somebody is named

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
Applying only the consumption limb of the definition and ignoring improvement potential.		
Using a threshold that has never been written down.		
Excluding a use on an estimate, then never testing the estimate because the use was excluded.		
Estimating from rated power and believed hours in a building where set points drift.		
Identifying uses without identifying the people who affect them.		
Leaving the review unopened for years, so that it describes a building that has moved.		

5. Action plan

Step from the book / gap found	Action in our property	Owner	Deadline
Write the criterion in one sentence, including both limbs of the definition.			
Mark every share in the analysis as measured or estimated.			
Measure, even temporarily, the two or three uses sitting just below the line.			
Make a separate pass applying the improvement-potential limb on its own.			
Name the people for every use on the list, contracted and seasonal staff included.			
Record how each performance figure was obtained, and when.			

Step from the book / gap found	Action in our property	Owner	Deadline
Put the list to the owner as an allocation of attention, not as an annex.			
Keep the list to three to six uses, and revisit it at a stated interval.			

In brief

A significant energy use is one that consumes substantially or one that offers considerable potential for improvement. Properties apply the first limb and forget the second, which is an expensive habit, because the second limb describes exactly the uses where the cheap wins are: modest consumers that nobody has yet looked at, with a control nobody owns and a schedule nobody wrote.

Source: The Helm and the Lens, Volume 4a: The Helm, subchapter 1.8. This sheet does not reproduce the text of the standard; work with your own copy of ISO 50001:2018 from an authorised source.