NOTE It is important to understand the role and impact of personnel before excluding them as EnMS effective personnel.

A.2.3 When reviewing the categories in A.2.2, person(s) shall not be double counted (see A.6).

A.2.4 Where a high percentage of EnMS effective personnel perform similar or repetitive processes, a reduction in the number is permitted. The justification and criteria for the determination of the EnMS effective personnel similar or repetitive processes shall be retained as documented information.

A.3 Determination of energy types

The certification body shall require the client organization to provide the number of energy types that account for 80 % of the client organization's total energy consumption. The energy types are those identified in the energy review. This number is not necessarily the same as the number of energy types for the client organization.

For purposes of this document, energy types shall be those that cross the boundary(ies) of the EnMS.

NOTE 1 Energy types that are extracted (e.g. crude oil, gas, coal) or captured (e.g. solar, wind) within the client organization boundary(ies) are considered to enter the boundary at the point of extraction or capture.

NOTE 2 See ISO 50004 for additional detail on energy types.

A.4 Determination of EnMS complexity

A.4.1 The EnMS complexity is based on three criteria:

— annual energy consumption;

— number of energy types;

— number of SEUs.

A.4.2 The EnMS complexity is a weighted and calculated value that addresses all three criteria listed in A.4.1.

The complexity, C, is calculated using Formula (A.1):

$$C=(F_{EC}\times 0,25)+(F_{ET}\times 0,25)+(F_{SEU}\times 0,50) \quad \text{(A.1)}$$

where

F_{EC} is the annual energy consumption complexity factor from Table A.1;

F_{ET} is the number of the energy types complexity factor from Table A.1;

F_{SEU} is the number of the SEUs complexity factor from Table A.1;

Table A.1 provides the weighted value and the associated ranges for the factors needed to calculate the EnMS complexity.

Table A.1 — EnMS complexity factors for determination of audit time

Criteria	Weighted value	Range	Complexity factor
Annual energy consumption (TJ)	25 %	≤ 20 TJ	1,0
		20 TJ ≤ 200 TJ	1,2
		200 TJ ≤ 2 000 TJ	1,4
		> 2 000 TJ	1,6
Number of energy types	25 %	1 to 2 energy types	1,0
		3 energy types	1,2
		≥ 4 energy types	1,4
Number of significant energy uses (SEUs)	50 %	1 to 3 SEUs	1,0
		4 to 6 SEUs	1,2
		7 to 10 SEUs	1,3
		11 to 15 SEUs	1,4
		≥ 16 SEUs	1,6
NOTE The annual energy consumption and SEUs are those available from the client organization's energy review.			

A.4.3 The complexity value C from Formula (A.1) is used to determine the level of EnMS complexity based on Table A.2.

Table A.2 — Level of the EnMS complexity

Complexity value C	Level of the EnMS complexity
> 1,35	High
1,15 to 1,35	Medium
< 1,15	Low

A.5 Determination of EnMS audit time

A.5.1 The certification body shall determine the audit time based on a combination of the number of EnMS effective personnel and the level of EnMS complexity. The audit time for the initial certification (Stage 1 and Stage 2) is shown in Table A.3. The certification body shall ensure that the audit time is reviewed and confirmed at Stage 1.

Where processes operate on a shift basis, the extent of auditing of each shift depends on the activities/processes that take place on each shift and the level of control of each shift that is demonstrated by the client organization. To audit effective implementation, at least one of the shifts shall be audited. The method of sampling shifts and the justification for not auditing the other shifts shall be documented.

Table A.3 — Initial certification audit time (audit days)

Number of EnMS effective personnel	Level of EnMS complexity		
	Low	Medium	High
1 to 8	2,5	4	5
9 to 15	4	6	7
16 to 25	5	7	9
26 to 65	6,5	8	10
66 to 85	8	9,5	11,5
86 to 175	8,5	11	12
176 to 275	9	11,5	12,5
276 to 425	10	13	15
≥ 426	The certification body provides the audit time for a number of EnMS effective personnel exceeding 425. The certification body shall retain documented information on decisions made to calculate the audit time.		

A.5.2 The audit time for the surveillance and recertification audits are shown in Table A.4. The certification process shall ensure that major changes to the EnMS, SEUs, facilities, equipment, systems or processes results in a review of the determined audit time.

Table A.4 — Surveillance and recertification audit time (audit days)

Number of EnMS effective personnel	Level of EnMS complexity					
	Low		Medium		High	
	Surveillance	Recertification	Surveillance	Recertification	Surveillance	Recertification
1 to 8	1	1,5	1	2,5	1,5	3
9 to 15	1	2,5	2	4	2,5	5
16 to 25	2	3,5	2,5	5	3	6
26 to 65	2,5	5	3	6	3,5	7
66 to 85	2,5	6	3,5	6,5	3,5	8,5
86 to 175	2,5	6	3,5	7	3,5	8,5
176 to 275	3	6	4	8	4	9,5
276 to 425	3,5	7	4	8,5	5	11
≥ 426	The certification body provides the audit time for a number of EnMS effective personnel exceeding 425. The certification body shall retain documented information on decisions made to calculate the audit time.					

See Annex D for an example of minimum audit day calculation for an initial certification.

A.5.3 Audits can include remote auditing techniques such as interactive web-based collaboration, web meetings, teleconferences and/or electronic verification of the client organization's processes.

NOTE Further information on the use of information and communication technology (ICT) for auditing/ assessment purposes can be found in IAF MD 4:2018.

A.5.4 Remote auditing activities shall be identified in the audit plan, and the time spent on these activities shall be considered as contributing to the duration of the audit. The audit plan shall include or reference the justification for the use of any remote auditing activities. It shall also include the selection of technologies and how they are managed.

NOTE Remote auditing can be used for other activities that are a part of audit time.