Collection of comments and suggestions on EPB Standard:

(EN) ISO 52000-1, *Energy performance of buildings — Overarching EPB assessment — Part 1: General framework and procedures*

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Disclaimer: see page 2

DISCLAIMER

In general, the National Standards Body can be contacted for information and comments on any CEN or ISO standard. A list of National Standards Bodies can be found at the CEN or ISO websites.

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1 Introduction

The EPB Center is a user platform for the EPB Standards and EPB Technical Reports, in short "the EPB documents". These EPB documents are developed and published by CEN and ISO, the European and international standards bodies. Therefore the EPBD Center works closely with CEN and ISO. Among various other activities, the EPB Center collects questions and comments on these EPB documents.

Based on the enquiries and suggestions received, the EPB Center experts prepare, to the best of their knowledge, clarifications and/or proposals for corrections.

1. Clarifications are given in the form of short texts, directly shown on the website (FAQ). When necessary, the short answer is complemented by a more extensive explanation as a [pdf] file.
2. Proposals (comments and suggestions) that could be taken into consideration in the context of future revisions of EPB documents are published in the form of the CEN/ISO commenting table. This standardized format ensures an efficient communication with CEN or ISO later.
   For each EPB document for which there is feedback, there is an autonomous file.

The present document is one of the series of proposals mentioned under point 2.

The comments and suggestions are published anonymously for reasons of privacy. The EPB Center has the responsibility to review and (optionally) generalise each received comment and add a proposal. The EPB Center experts aim at the best possible support for the implementation and application of the EPB documents in practice.

Additional information

To see whether there already exist clarifications and/or a comment table for any of the other EPB documents, please consult the corresponding link on this webpage.

Additional feedback on any of the EPB documents can be submitted via the contact form on the EPB Center website. Please describe the issue clearly.

> NOTE Also technologies not yet covered by the EPB standard can be reported. Please describe the technology clearly, e.g. via a link to a webpage. If possible, also add existing (for instance national) assessment methodologies for the technology (by means of web links, etc.).

The EPB Center intends, at the appropriate time, to forward all clarifications and proposals to CEN or ISO for potential use in future updates of the EPB documents.

Acknowledgement

Although the issues are published anonymously, the EPB Center gratefully acknowledges all contributions.

2 Table with comments and proposed changes

Comments and suggestions

Date:	Document: (EN) ISO 52000-1:2017	Project:

MB/ NC[1]	Comment No (for ref.)	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table/ (e.g. Table 1)	Type of comment[2]	Comments	Proposed change	*In this EPB Center document, this column is for internal use only*
EPB Center	1						
EPB Center	2	general		ed	A list of comments have been received in Sept. 2019 from the ISO Editorial Project Manager concerning the texts in common paragraphs for all EPB standards: changes are necessary to align the document with the current ISO directives	Change the texts accordingly	
EPB Center	3	general		te	Suggestions for changes resulting from discussing comments on prEN_17423	In preparation by CEN/TC 371/WG 1	
EPB Center	4	Introduction		ge	Add the objective of the EPB standards	Add at the end of the first paragraph: “This set aims at reducing energy need, energy use, fossil fuel and CO_2, in order to mitigate climate change.”	
EPB Center	5	3.4		ed	What is the difference between definitions 3.4.10 and 3.4.26? It's seems to be a duplication of the same definition.	Remove one of these two duplicate definitions	
EPB Center	6	3.4.10, 3.4.11		ed	Definitions 3.4.10 and 3.4.11 on “renewable energy” and non-renewable energy” are not complementary	Update the definitions on “renewable energy” and non-renewable energy” to become complementary	
EPB Center	7	4.1		ed	How kg and m³ could be the units of "Energy"? A weighted energy amount is by definition a property that has the same dimension for all energy carriers (like CO_2 emission, €, etc.), thus allowing to sum up different carriers.	kg, m³ etc. should be defined as “energy carrier amounts” because they can be used only for some specific carriers. See 9.6	
EPB Center	8	4.1		te	In 4.1 the unit is kg/kWh In annex B it is g/kWh Standards should aim at a future cross-sectoral comparability (buildings, traffic, industry, agriculture)	Change units to g/kWh	

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2 **Type of comment:** **ge** = general **te** = technical **ed** = editorial

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EPB Center	9	9.7		te/ed	Actually comment on the TR, but may have impact on the standard: Text in 9.7.3 **of the TR**: "In addition, the renewable energy ratio RER should be calculated on the total primary energy consumptions (and not on the energy balance). The total amount of primary energy, E_{Ptot} is linked to the required energy services of the assessed building weighted by their total primary energy factor." See also Annex G (of standard and TR): 'total' versus 'energy balance' is not clear. Maybe there is also mix up with distinction between 'on site' and 'distant'?	Go through the document and the TR to ensure consistent use of the term "*total (primary energy)*". *Total primary energy* should only be used to distinct Ptot, Pnren, Pren. *Total* can also refer to total of all EPB services (H, C, V, etc.; subscript: TOT). Total can also refer to *on site* + *nearby* + *distant*? If so, this should be explicitly mentioned.	
EPB Center	10	9.7		te	There seems to be a need for an alternative approach for RER that avoids negative or extreme high values for RER and provides RER = 100% in case of zero total energy. Is this covered by RER defined for Step A (RER_A)?		
EPB Center	11	11.6		ed	A note with reference to the examples in Annex J of the TR would help to understand the formulae and to see all details	Add, at a prominent place in 11.6, a Note with reference to the examples in Annex J of the TR	
EPB Center	12	11.6	Figure 7	te/ed	There is a contradiction between figure 1, where PV panels are outside the assessment boundary, thus creating a delivered energy, and figure 7, where the produced and for EP used electricity Epr;el;used;EPus bypasses the assessment boundary and is therefore not counted as a delivered energy (which is what we did so far in Switzerland, but which is challenged now). There is no equation in the standard taking Epr;el;used;EPus into account as a weighted delivered energy (I claim this should be added to equation (19)). …[more details]….	Some members of CEN/TC 371/WG 1 worked out Excel sheets with more complete drawings.	

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EPB Center	13	11.6.4	Figure 8	ed	The legend of Figure 8 of the French version is not correct.	comments on the French version to be forwarded to AFNOR	
EPB Center	14	Annex A & B	A.1, B.1	ed	The text behind dashes (“-“) has to be indented	Indent the text behind the dashes	
EPB Center	15	Annex A & B	A.2, B.2	ed	The text in B.2 shall be a copy of the text in A.2, because Annex B is a informative filled in Annex A	Text has to be made the same	
EPB Center	16	Annex A & B	Table A.3 and Table B.3	ed	It is quite unclear what is meant with “subset”	In this table, a subset is a group of options (choices) of which only one choice is possible in a specific calculation case. This is indeed not intuitively clear, so it requires explanation and/or a better formulation and lay out. Suggestion: Extend the current footnote (“a One choice is possible per subset.”) to make more clear that there are different subtypes of object types; within each subset only one choice is possible. Example (see Table B.3): subset 1: an object is either a whole building or a building unit or a part of a building. It cannot be bone AND the other. But an object can be a building unit (subset 1) AND an existing building (subset 2). Perhaps it is clearer if the object types are omitted and the subset types are separately specified	
EPB Center	17	Annex B	Table B.2	ed	First column rows 2 -5 should not have been grey shaded	Remove grey shading for first column, rows 2 -5	
EPB Center	18	Annex A & B	Table A.8 and Table B.8	ed	Titles shall be the same: Table A.8 — Application types (See Clauses 6 and 9)	Titles shall be made the same The titles of Tables in Annex A and Annex B shall indeed be identical. It has to be checked whether	

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					Table B.8 — Application types (See Clauses 6, 9 and 10.1)	the references in the title include each mentioning of the table (then the title of Table B.8 is correct), or include only the locations in which context the table is to be filled (then the title of Table A.8 is correct)	
EPB Center	19	Annex A & B	Table A.13 etc. and Table B.13 etc.	ed	Some Tables in Annex B use a *different* reference to the *same* footnotes ("a" versus "NOTE").	Change the references to the footnotes in the Tables of Annex B, to be in line with (identical to) the Tables of Annex A. If extra footnotes are added in the Tables of Annex B, as part of filling in the Tables, these should have distinct references (and be placed in a non-grey shaded cell, which is in general correctly done)	
EPB Center	20	Annex A & B	Table A.16 and Table B.16	te	See also 9.6.2. There is no Table that asks to indicate if net or gross caloric value is used. Isn't that needed???	Add a row in Table A.16 and Table B.16 to specify if the values are based on net or gross caloric value	
EPB Center	21	Annex A & B	Table B.16	ed	The layout of Table A.16 and Table B.16 is different.	First row in Table B.16 should be split. "Delivered from distant" should be on a separate (second) row (not-grey shaded)	
EPB Center	22	Annex A & B	Table A.18 and Table B.18	te	Table A.18/B.18 refer to articles 8.2 and 8.5, which are related to the measured overall energy performance. However, the title of Table A.18/B.18 is called "Building services considered in the energy performance **calculation**".	There should be also a reference to Table A.18/B.18 from 6.2.5 , Building services. The title of Table A.18/B.18 should have been called "Building services considered in the energy performance assessment". This was not intentional. Tables A.18/B.18 shall be read together with tables A.10/B.10 and clause 6.2.5. For each combination identified in table A.10/B.10 there will be a column in table A.18/B.18 defining that combination. All refer to the "energy performance assessment", that includes both measuring and calculating the energy performance. (techn.) Errata: There should have been also a reference to Table	

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						A.18/B.18 from 6.2.5 , Building services. There should be a reference from table A.10/B.10 and vice-versa The title of Table A.18/B.18 should have been called “Building services combination considered in the energy performance assessment”. Also other tables in Annex A/B should be checked on this issue.	
EPB Center	23	Annex A & B	Table A.26 and Table B.26	te	Table A.26 contains "Energy embedded in materials". This is not defined in § 9.6.2 or § 9.6.3. From the French translation, it is understood that it was the energy in the fuel material itself, but in that case, the answer should obviously be "Yes". As the default answer is now, I suppose my understanding was wrong and that it refers to the "grey energy" in the construction materials. Is it so? If yes, should the standard not be clearer.	This is obviously not “energy in the fuel material itself “ e.g. energy contents of the carrier, as the answer “NO” in table B.26 confirms. The question is if the overheads also include the energy to produce the materials used to build the transport system of the carrier form the source to delivery point. You may account energy used in the process of construction of the transport system (e.g. fuel for machinery and trucks) ang energy embedded in the materials used (e.g. energy used to produce concrete, iron, copper and other materials).	
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3 Longer explanations

3.1 General

These extra pages below the table (if any) are provided for more extensive explanation of specific comments or proposed changes.

NOTE When the table is provided to CEN or ISO, it will be handled automatically for the collation of comments submitted on CEN or ISO. In that case all the information that is not in the table itself will be lost and needs to be submitted separately.

<Not applicable>