

ISO 16745-1:2017-05 (E)

Sustainability in buildings and civil engineering works - Carbon metric of an existing building during use stage - Part 1: Calculation, reporting and communication

Contents	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Principles	5
4.1 General	5
4.2 Completeness	5
4.3 Consistency	5
4.4 Relevance	6
4.5 Coherence	6
4.6 Accuracy	6
4.7 Transparency	6
4.8 Avoidance of double counting	6
5 Protocol of measuring the carbon metric of a building in the use stage	6
5.1 System boundary	6
5.1.1 Types of carbon metrics of a building	6
5.1.2 System boundary for the carbon metrics of a building	7
5.2 Carbon metric and carbon intensity	10
5.3 Calculation of GHG emissions	10
5.3.1 GHG emissions associated with energy use of a building	10
5.3.2 Measurement of energy carrier	10
5.3.3 Exported energy	11
5.3.4 Energy usage	11
5.3.5 GHG emission coefficients	12
6 Reporting and communication of the carbon metric	14
6.1 General	14
6.2 Reporting of the carbon metric	14
6.2.1 Mandatory requirements	14
6.2.2 Additional information	18
6.3 Communication of the carbon metric	19
6.3.1 Type of communication	19
6.3.2 Provision of information	20
6.3.3 Availability of information	21
6.3.4 Carbon metric disclosure report	21
6.3.5 Explanatory material	22
Annex A (informative) Aim of carbon metric	23
Annex B (informative) Building energy used defined by usage by ISO 12655	24
Annex C (informative) Types of factors or coefficients by ISO 16346	27

Annex D (informative) Allocation of emissions related to target energy in combined heat and power generation by VDI 4660 Part 2	28
the description and assessment of greenhouse gas emissions caused by buildings	35
Bibliography	38