

Position Paper RICS

EU framework for calculating the global warming potential of new buildings

RICS (the Royal Institution of Chartered Surveyors) is the leading global organisation for professionals in property, land, construction and related sustainability issues. As part of our role, we help to set, maintain and regulate standards, as well as provide impartial advice to governments and policymakers.

To ensure that our members can provide the quality of advice and level of integrity required by the market, RICS qualifications are awarded to individuals who meet the most rigorous requirements for both education and experience and who are prepared to maintain high standards in the public interest.

We welcome the publication of the Draft Delegated Act setting out a Union framework for the national calculation of life-cycle global warming potential as part of the EPBD, with the objective to establish a harmonised framework to conduct life cycle assessment of new buildings across members states.

The RICS Whole-Life Carbon Assessment

The RICS Whole-Life Carbon Assessment standard¹ builds upon the high-level principles of EN 15978, addressing its lack of specificity with detailed, practical guidance. Originally launched in 2017 and widely adopted in the UK, the updated 2023 edition expands global applicability for both buildings and infrastructure. It ensures consistency and accuracy through prescriptive rules and a structured methodology.

The WLCA 2nd edition is a comprehensive standard for whole-life carbon assessments. It complements national and regional frameworks and aligns with internationally recognized standards, such as EN 15978, EN 17472, EN 15643, EN 15804, the International Cost Management Standards (ICMS) 3rd edition and ISO standards.

¹ [Whole life carbon assessment \(WLCA\) for the built environment](#)

Compared to other methodologies, the RICS WLCA Standard:

- Presents a more consistent and comprehensive breakdown of life cycle, for a more precise allocation of emissions across all lifecycle stages.
- Covers both buildings and infrastructure projects
- Determines complexity and detail of WLCA depending on project stage, increasing requirements from early-stage design to post-completion assessment
- Provides rules for appropriate allocation of emissions to lifecycle stages when assessing retrofits, demolitions, and extension projects
- Provides rules for clear delineation of project and asset boundaries
- Integrates numerical method to assess WLCA uncertainty (considering project stage and data quality) and produce an uncertainty factor (i.e. a % uplift to the 'base' WLCA results)
- Provides guidance for specific aspects of WLCA, such as decarbonisation scenarios, treatment of biogenic carbon, allocation of scope 1, 2, and 3 emissions, and carbon offset and storage

Our recommendations

RICS has been advocating for measuring whole-life carbon in all buildings through our Whole Life Carbon Assessment (WLCA) for the Built Environment standard, which provides a consistent methodology for measuring and managing lifecycle carbon emissions in construction and infrastructure projects.

To ensure the delegated act is effective and fit for its intended purpose, we present our views below:

1) Reference Study Period

The delegated act specifies that the life cycle GWP shall be calculated over a reference study period (RSP) of 50 years. While this aligns with the set out in EN 15978, we note that some national practices, such as in the UK, use a 60-year RSP. For the sake of transparency, comparability, and benchmarking beyond the EU, we refer to our harmonisation guide², which recommends to clearly state the RSP in every assessment report, so that the life cycle

² [WLCA-harmonisation-guide.pdf](#)

carbon of modules B1-B8 can be reduced to an annual value, which allows comparison with assessments using a different RSP.

2) Data For Calculation

We recommend linking ICMS³ (International Cost Management Standards) under project-specific data. ICMS provides a standardized set of project attributes and values, which can serve as a reference for structuring project-specific data consistently.

We note that project-specific data and product-specific data currently share the same definition in table 1 of the Annex Delegated Act, which may lead to confusion in practice. We recommend providing further clarification on their intended use. Specifically, project-specific data should focus on project attributes and quantities (which are generally primary data sources), while product-specific data should focus on material or product characteristics (secondary data). These attributes and values are clearly defined in ICMS 3rd edition and come from global stakeholder consultations.

3) Useful Floor Area

Accurately defining useful floor area is extremely important to provide a consistent basis for comparability between and within markets. We are very pleased to see the International Property Measurement Standards⁴ (IPMS) have been incorporated into this legislation. IPMS provides the most reliable and consistent method for measuring floor area, ensuring transparency, comparability, and fairness in the calculation of life cycle GWP. However, the delegated act does not provide detailed criteria for calculating floor area. As a result, differences in national practices could remain and potentially leading to inconsistencies. We suggest that further clarification could provide, for example by specifying the use of IPMS 2 (Gross Internal Area), to ensure that all Member States calculate floor area using the same criteria. This would create consistency and clarity across Member States and allow fair comparison of carbon performance.

³ [ICMS: International Cost Management Standards](#)

⁴ [The International Property Measurement Standard \(IPMS\)](#)

4) Scope Of Life-Cycle Stages

We recommend that life cycle stage A5, covering construction activities, be further subdivided in line with the RICS standard and the upcoming new EN15978. Breaking A5 down into more detailed sub-modules (5.1, 5.2, 5.3, 5.4) would improve the understanding of emission occurring at this stage by differentiating between pre-construction demolition, assembly/installation, waste, and worker's transportation. Other stages also benefit from subdivisions that allow for more detailed reporting of results, which in turn allow more meaningful analysis.

We note that some important life cycle modules are currently treated as optional. In practice, this can lead to inconsistencies, as some countries or stakeholders may include certain modules while others do not. We recommend that module B7 (water use) should not be optional, as the data is generally easy to collect. To ensure consistent reporting, we suggest using the table below.

A1-A3 Sequestered carbon within installed materials/ products (benefit - assumed negative figure)
A1-A3 Product stage (exc sequestered carbon)
A4 Transport to and from site
A5.1 Pre-construction demolition including waste and waste management of those activities
A5.2 Construction activities
A5.3 Waste & waste management
A5.4 Transport of construction workers (optional, include if significant)
B1.1 In use emissions and removals (carbonation and materials)

B1.2 Fugitive emissions (refrigerants)
B2-B3 Maintenance and repair
B4 Replacement
B5 Refurbishment/ planned change (where relevant)
B6.1-B6.3 Regulated and un-regulated energy in-use
B7.1 Water used by essential building- integrated systems
B7.2 Water used by other building-integrated systems (recommended but optional)
B7.3 Water used by non-building integrated systems (optional)
B8.1 User activities energy-related impacts (optional)
B8.2 User activities other impacts (optional)
C1 Deconstruction/demolition process
C2 Transport to waste processing or disposal facilities

C3
Waste processing for reuse, recycling and/ or energy recovery
C4
Waste disposal
D1
Potential net benefits/loads from reuse, recycling, energy recovery and/ or other recovery
D2
Potential benefits and loads from exported utilities

5) Allocation of Emissions Related to a Building's Energy Consumption and On-site Generation

The delegated acts allow Member States to choose how to allocate embodied emissions from other system parts, such as on-site renewables, to the building or elsewhere. We recommend a simplified approach: Member States should be required to allocate all embodied emissions of these systems to the building. This would: a) to avoid the fictitious reduction of embodied carbon via unclear accounting techniques; and b) ensure comparability across Member States.

6) Scope of Building Elements and Technical Equipment

We are very pleased to see that the table in the Delegated Act, defining the hierarchical scope of building elements and technical equipment, is fully aligned with ICMS (International Construction Measurement Standards). This alignment is a positive aspect, as it provides a shared framework to Member States.

7) Results of life cycle GWP

We welcome the clear structure provided in Table 5 for reporting life-cycle GWP in the building's EPC. However, we recommend a few refinements to improve consistency, and refer to the table provided under heading 4:

- Consider separating A4 (transport) and A5 (construction installation processes) to allow more granular reporting.
- Similarly, reporting for module B could be disaggregated where feasible, and module C could also be clarified.
- Water use (B7) is not currently included in the table, which means it will likely not be included by Member States; emissions due to water consumption are important, so they should be included in the table.

We note that the reporting table does not include biogenic carbon as a separate item. To align with the upcoming updated EN15978 and our WLCA standard, we strongly recommend separating biogenic carbon in modules A1-A3, as shown in the table provided under heading 4.

8) Harmonization across Europe

Overall, we recommend that reporting rules be harmonized across Member States, without leaving flexibility that could lead to inconsistent approaches. Even if some stages are combined for simplicity, all Member States should follow the same method to ensure transparency and comparability of assessment results.

A harmonized methodology at the EU level is essential to ensure consistent measurement of building emissions across Member States. This consistency would provide greater confidence when comparing projects across countries, facilitate fairer regulation of emissions through EU policies, and enable uniform tracking to evaluate the effectiveness of these policies. The importance of consistency can be seen in the challenges faced with the implementation of Energy Performance Certificates (EPCs), where inconsistencies between Member States created significant obstacles to using EPCs as a fair and transparent regulatory tool.

To support the European Commission in creating a harmonized WLC methodology, the EU should establish a framework applicable across Member States. Where national methodologies exist, they should either align with or adapt to the EU framework. This would ensure that WLC assessments conducted under the RICS WLCA standard are automatically or easily compliant with EU requirements. Alignment could include adopting aspects of the RICS standard, such as granular lifecycle stage breakdowns, differentiation between buildings and infrastructure,

detailed scope definitions, increased assessment complexity over project stages, emissions allocation rules, boundary delineations, uncertainty assessments, and guidance on biogenic carbon, offsets, and storage.

Conclusion

RICS is committed to supporting WLC implementation through resources such as the RICS National Playbook⁵ and the Capacity-Building Framework⁶. Training products, including the Global Introduction to Whole Life Carbon Assessment and the WLCA Training Programme Certificate, further equip stakeholders to align with evolving EU methodologies, including Level(s).

We remain committed to assist EU in its drive for consistency, alignment, and transparency in whole life carbon assessments. Currently we are co-leading an effort in the UK to pilot the Net Zero Carbon Buildings Standard and encourage EU to adopt these types of best practice from other parts of the world.

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⁵ [National playbook for implementing whole life carbon assessments](#)

⁶ [Capacity building playbook for a sustainable built and natural environment](#)