

# UNEP Publications Reference Series

## Guidelines for Peer Reviewers

This reference document is part of a series aimed at highlighting key policies, procedures, best practices and common oversights encountered during the UNEP publication creation process. These process-specific guides are drawn from the more comprehensive *UNEP Publications Guidelines* and *UNEP Publications Policy*. View the entire series:

[AUTHOR GUIDELINES](#) | [PEER REVIEWER GUIDELINES](#)  
[PLAGIARISM AND CITATION FACT SHEET](#) | [EDITOR GUIDELINES](#) | [LAYOUT MANUAL](#)

**Please review these guidelines carefully, even if you are an experienced peer reviewer.**

### Overview: Peer Review for a UNEP Publication

The peer review process is a critical step in the production of UNEP publications. Comprehensive peer review helps ensure that content is scientifically accurate, and plays an essential part in safeguarding the reputation of UNEP as a reliable source of objective and factual scientific research, information and analysis. Authors must address constructive feedback provided by peer reviewers before publications are moved on to the editing, copy-editing, and final review processes. UNEP recommends that peer reviewers complete the [Certified Peer Reviewer](#) course from Elsevier Academy, in addition to carefully reviewing this document.

Peer reviewers for UNEP publications are expected to:

- review the work of all authors objectively, regardless of existing relationships;
- ensure the methods, analysis and interpretation presented in the manuscript are appropriate and robust;
- review citations and references to verify they are from peer-reviewed or reputable objective sources;
- evaluate the originality, significance and relevance of the manuscript;
- assess the clarity of key messages, conclusions, and overall narrative flow;
- provide clear and constructive feedback that can be addressed into a new draft.

Peer reviewers are **not** expected to:

- proofread, check style, or make extensive edits.

Peer review serves to improve the publication. The purpose of a peer review is to help improve a manuscript by allowing the authors to identify weaknesses in a publication. This could be a lack of clarity, evidence, or any range of issues that the peer reviewer believes stands in the way of the author fully communicating her or his ideas.

The goal is to **improve** the research and publication. It helps to keep in mind that authors might perceive a peer review as critique of their work. Peer reviewers have a responsibility to be strong in their views—regardless of the authors—and diplomatic in the way those views are articulated. It can help to frame feedback positively by focussing on how things can improve, rather than what mistakes have been made, and to be specific regarding possible improvements.

Unhelpful feedback: *“This section is unclear.”*

More helpful feedback: *“This section would be clearer if you gave specific examples of the ways in which microplastics negatively impact marine ecosystems.”*

## Methods and analysis

Peer reviewers are responsible for evaluating whether authors are justified in drawing their conclusions, based on **rigorous and sound academic research, methodology and analysis** that has been clearly presented in the paper. Regardless of whether the peer reviewer agrees with the authors' conclusions, the paper must present a scientifically sound rationale. If it is not clear to the peer reviewer, it will likely not be clear to other readers. A reviewer will also ensure the manuscript outlines what methods and analysis were used, including detail on any statistical analysis and interpretation.

## Citations and references

The role of peer reviewers is to ensure the in-text and end-text references are relevant, appropriately credited, and are the most suitable for the topic under consideration. Peer reviewers must ensure that all primary and secondary literature –including that of the author or organization –is clearly acknowledged.

Data and other findings must be **current and from objective, peer-reviewed publications**. While reputable think-tanks and other advocacy organizations often publish high-quality work that is readily available, they are often not objective, not peer reviewed and, thus, not appropriate for citing facts and drawing conclusions. Nevertheless, such publications can be used for helping to illustrate a particular point or for adding emphasis to an argument as long as the source and if necessary, limitations are clearly provided.

Peer reviewers should pay close attention to citations and references to ensure sources are **reputable and recently published**. If an author is using data that are more than 10 years old, there should be a clear rationale. A review of the author's list of references should be undertaken to ensure it is appropriate for the purpose of the publication and does not omit major sources that should be cited.

## Originality, significance and relevance

Peer reviewers should assess the originality of the work being presented and provide feedback on whether the publication presents new data or arguments that are an evolution of existing literature or whether it is only rehashing previously published ideas.

## Clarity and narrative flow

Peer reviewers should ensure that arguments and conclusions are clear, follow a logical flow of ideas and presented with evidence. Peer reviewers should flag any instances where this is not the case.

There is no need to proofread, check style or make extensive edits, as this will be tackled in the editing stage of production.

## Annex: Peer reviewer checklist

The focus of the peer review is to check content for scientific and technical accuracy. Peer reviewers have expert knowledge of the content area and are able to conduct a meticulous fact-check. Internal and external peer reviewers, by signing off on the publication, should keep the following checklist in mind noting they should be able to respond to most questions but not all:

- Is the rationale for the work clear and based on a sound foundation of science?

- Is the scientific methodology/design that underpins the publication sound (including any analysis) and has this been documented?
- Is the content current and does this work fill an identified gap?
- Does the publication build on previous UNEP research on the same topic area, and is it in line with UNEP positions and data on the same?
- Is the publication concise, well written and targeted?
- Is the publication logical and do the findings address the intended purpose of the publication?
- Are the research materials and methods used by the author explained clearly and are they linked to the results?
- Does the discussion/conclusion clearly support the analysis and results?
- Is content appropriately in-text and end text referenced with peer reviewed references?
- Are tables and figures appropriately labelled?
- In terms of scientific content and accuracy, is the work/science ready for publishing?