Policy
on Safeguarding Good Scientific Practice
and Addressing Scientific Misconduct
at Ecologic Institute

11 February 2026

Employees of Ecologic Institute who are involved in scientific work are required to comply with this Policy on Safeguarding Good Scientific Practice in the course of their duties.

Ecologic Institute regards adherence to these principles as a mandatory prerequisite for conducting scientific work.

Based on the guidelines of the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG), Ecologic Institute has adopted the following Policy on Safeguarding Good Scientific Practice and Addressing Scientific Misconduct.

This Ecologic Policy consists of two parts: the first part provides an accessible summary of the key rules applicable at Ecologic Institute. The second part is more detailed and reproduces the wording of the DFG guidelines, which have been adapted in part for Ecologic Institute.

Part I – Summary

1 Mission Statement

Scientific integrity forms the foundation of trustworthy scientific work. It contributes to the quality of Ecologic Institute's work and to its reputation. This includes, in particular, adherence to good scientific practice, the critical review and scrutiny of results, and maintaining honesty with regard to one's own contributions and those of others.

2 Commitment to Good Scientific Practice

All employees of Ecologic Institute who are involved in scientific work ("scientific staff") are required to adhere to the principles of good scientific practice. In addition, compliance with good scientific practice is also the duty and responsibility of the director and of project leads.

In addition to the provisions set out in this Policy, scientific standards may also arise from the standards of the respective academic discipline relevant to the work in question, as well as from requirements set by the director, the project lead and the commissioning client.

Scientific staff are expected to keep their knowledge of good scientific practice and of the current state of knowledge in their field up to date.

Where permitted by the terms of the commission, scientific staff shall take full account of the current state of knowledge when planning a project and duly acknowledge it. They shall apply

scientifically sound and transparent methods and carry out all stages of the scientific process in accordance with professional standards (*lege artis*). Quality assurance measures must be clearly documented, particularly where new methods are developed. Legal and ethical requirements, including copyright, must be observed.

If scientific staff identify inconsistencies or errors after making findings publicly available, they are required to correct them without delay.

3 Mandatory Participation in Training

All scientific staff are required to participate at least once in training on this Policy and on good scientific practice at Ecologic Institute.

4 Application of the Four-Eyes Principle

Project leads and work package leads must, as a matter of principle, review work results – in particular scientific publications and project reports – prior to their publication or submission to the commissioning client. This review must include, at a minimum, an assessment of plausibility, linguistic quality and, on a sample basis, scientific quality.

Work results produced by a project lead or work package lead should accordingly be reviewed by a second suitably qualified scientific staff.

5 Attribution of Sources and Use of AI Applications

Scientific staff must cite the original sources of any third-party texts, data, materials, software, etc. used as part of their scientific practice. As a general rule, recipients of texts and other outputs must be able to identify at any point who is responsible for the content.

All sources must be independently reviewed and assessed. Blind citations, regardless of whether they originate from academic literature, AI systems or other sources, are not permitted.

Substantive and verifiable contributions by partners, competitors and predecessors to the content (authorship) must be duly recognised and appropriately attributed. Where possible and reasonable, scientific staff shall agree and document arrangements on usage rights at an early stage of the project work.

The use of artificial intelligence (AI) applications that contribute to substantive content, rather than serving a purely editorial function, must be reported internally and disclosed in externally published outputs. The Ecologic Institute's guidelines on the use of AI must be observed.

6 Documentation, Data Retention and Publication

Scientific staff must document all information relevant to the generation of their results in a manner that is sufficiently clear and comprehensible to allow the result to be reviewed and assessed, as required and appropriate in the respective discipline.

All documents and data relevant to a project or publication, in particular funding applications, grant award notices, contracts, relevant internal agreements and agreements with the commissioning client and third parties, work results and publications, must be stored in the designated institutional repository and retained for a minimum period of ten years.

Subject to the applicable legal framework, and in particular in the case of work funded by grants, scientific staff shall ensure that their results are made available to the scientific community.

7 Responsibility of the Director

The director of Ecologic Institute shall ensure, through appropriate organisational principles, defined responsibilities, structures and procedures, that compliance with this Policy is enabled and its effective implementation is ensured.

In particular, the director shall ensure that this Policy, and any subsequent amendments, are communicated within Ecologic Institute, are accessible to all scientific staff, and are explained to them in an appropriate manner.

The organisational framework shall include clear, written procedures and principles for recruitment and staff development, as well as appropriate career support and equal opportunities for all scientific staff.

8 Responsibility of the Project Lead

The project lead is responsible for ensuring compliance with good scientific practice within the project. They shall ensure that all project team members are familiar with this Policy on good scientific practice and comply with it in practice. This shall be achieved through regular meetings, instructions and other appropriate measures.

The project lead shall convey the principles of good scientific practice and define any project-specific standards required for the project concerned.

They shall also ensure that the roles and responsibilities of all scientific staff involved are clearly defined at all times and shall seek to maintain an appropriate balance between guidance and individual responsibility.

9 Confidential Advisers (Ombudspersons)

Ecologic Institute shall appoint up to three impartial and trusted confidential advisers (ombudspersons) to whom scientific staff may turn in cases of conflict relating to good scientific practice, as well as in cases of actual or suspected scientific misconduct (see Section 10). These individuals must be recognised within the Institute as scientists of integrity. The director may not serve as confidential adviser.

These confidential advisers (ombudspersons) shall be available to all scientific staff of Ecologic Institute as points of contact. They shall act independently in the performance of their role and shall receive the necessary institutional support and acceptance.

10 Handling of Breaches of this Policy

The consequences of breaches of this Policy depend on the nature and severity of the breach. In particular, scientific misconduct (see below) may result in employment-related disciplinary action.

A breach of this Policy may also arise from active involvement in the misconduct of others, knowledge of falsification by others, the knowing co-authorship of publications affected by falsification, or a serious failure to fulfil supervisory duties.

10.1 Scientific Misconduct

Not every breach of the principles of good scientific practice constitutes scientific misconduct. The circumstances of each individual case are decisive.

In defining scientific misconduct, Ecologic Institute follows the Rules of Procedure of the German Research Foundation (DFG) for dealing with scientific misconduct. According to these rules, scientific misconduct is deemed to have occurred where, in a context relevant to scientific work, a person intentionally or through gross negligence:

1. makes false statements;
2. misappropriates the scientific work of others;
3. impairs the research activities and scientific work of others;
4. is involved, through co-authorship, in the scientific misconduct of others; or
5. breaches their duty of supervision.

A person also commits scientific misconduct if they intentionally participate in the misconduct of others.

These forms of misconduct are defined in greater detail in the DFG Rules of Procedure.

10.2 Procedure

In handling allegations of scientific misconduct, Ecologic Institute shall give due consideration to confidentiality and the presumption of innocence.

Reports by whistleblowers must be made in good faith. Deliberately false or malicious allegations may themselves constitute scientific misconduct.

Neither the whistleblower nor the person concerned by the allegations shall suffer disadvantages to their scientific or professional advancement as a result of a report.

Confidentiality may be limited in individual cases, for example where there is a legal obligation to disclose information, where the person concerned would otherwise be unable to defend themselves adequately, or where the matter could not otherwise be properly addressed.

As a rule, suspected breaches of this Policy should first be discussed and, where possible, resolved within the project team.

If a suspected breach cannot be resolved within the project team, it should be reported to the Institute via one of the following channels: the director, the relevant manager (Programme Directors, Navigators), or the appointed confidential advisers (ombudspersons). Alternatively, whistleblowers may contact the German Research Ombudsman (Ombudsgremium für die wissenschaftliche Integrität in Deutschland, OWID).

If, on the basis of the information provided and objective indications, the relevant managers or confidential advisers consider that there are reasonable grounds to suspect scientific misconduct, the director shall be informed. Acting on the proposal of the confidential advisers, the director shall decide on the establishment and composition of an investigation committee.

Any potential conflict of interest on the part of members of the investigation committee or of the confidential advisers may be raised at any time, either by the individuals concerned themselves or by the person against whom the allegations are directed. The director shall decide on such matters in consultation with the confidential advisers.

The person concerned by the allegations shall be given the opportunity to respond at every stage of the procedure.

The committee shall examine the case and hear the parties involved. If the committee concludes that the suspicion is not substantiated, it shall terminate the procedure in consultation with the director. Otherwise, it shall submit recommendations on further action to the director, who shall decide on the measures to be taken in each individual case.

Until culpable misconduct has been established by the investigation committee, all parties involved (confidential advisers, investigation committee, director) shall maintain strict confidentiality regarding both the persons involved and the findings of the procedure.

All stages of the procedure, including their outcomes, shall be documented in writing.

Part II – DFG Guidelines for Safeguarding Good Research Practice (Code of Conduct)

September 2024

3. Standards of Good Research Practice

3.1 Applicability

The DFG Code of Conduct is aimed at both researchers and institutions (HEIs and non-HEI research institutions). It outlines the main standards of good research practice and describes the procedure to follow in the event of non-compliance with these standards.

2 Principles

Guideline 1: Commitment to the general principles

Higher education institutions and non-HEI research institutions, with the participation of their members, work together to define rules of good research practice, ensure that their employees are made aware of these guidelines and related policies and regulations, and require their employees to comply with them with due regard for the type of research undertaken in the relevant subject area. Individual researchers are responsible for ensuring that their own conduct complies with the standards of good research practice.

Explanations:

In particular, the principles include working Lege artis, maintaining strict honesty in attributing one's own contributions and those of others, rigorously questioning all findings, and emitting and promoting critical discourse within the research community. The principles of good research practice are set out in the following guidelines.

Guideline 2: Professional ethics

Researchers are responsible for putting the fundamental values and norms of research into practice and advocating for them. Education in the principles of good research begins at the earliest possible stage in academic teaching and research training. Researchers at all career levels regularly update their knowledge about the standards of good research practice and the current state of the art.

Explanations:

Experienced researchers and researchers in early career phases support each other in a process of continuous mutual learning and ongoing training and maintain a regular dialogue.

Guideline 3: Organisational responsibility of heads of research institutions

The heads of HEIs and non-HEI research institutions create the basic framework for research. They are responsible for ensuring adherence to and the promotion of good practice, and for appropriate career support for all researchers. The heads of research institutions guarantee the necessary conditions to enable researchers to comply with legal and ethical standards. The basic framework includes clear written policies and procedures for staff selection and development as well as for the support of researchers in early career phases and equity and diversity.

Explanations:

The head of each HEI and non-HEI research institution is responsible for ensuring that an appropriate organizational structure is in place at the institution. He or she makes certain that the tasks of leadership, supervision, quality assurance and conflict management are clearly allocated in accordance with the size of individual research work units and suitably communicated to members and employees. Regarding staff selection and development, due consideration is given to gender equality and diversity. The relevant processes are transparent and avoid implicit bias as much as possible. Suitable supervisory structures and policies are established for researchers in early career phases. Honest career advice, training opportunities and mentoring are offered to researchers and research support staff.

Guideline 4: Responsibility of the heads of research work units

The head of a research work unit is responsible for the entire unit. Collaboration within the unit is designed such that the group as a whole can perform its tasks, the necessary cooperation and coordination can be achieved, and all members understand their roles, rights and duties. The leadership role includes ensuring adequate individual supervision of researchers in early career phases, integrated in the overall institutional policy, as well as career development for researchers and research support staff. Suitable organizational measures are in place at the level of the individual unit and of the leadership of the institution to prevent the abuse of power and exploitation of dependent relationships.

Explanations:

The size and the organization of the unit are designed to allow leadership tasks, particularly skills training, research support and supervisory duties, to be performed appropriately. The performance of leadership tasks is associated with a corresponding responsibility. Researchers and research support staff benefit from a balance of support and personal responsibility appropriate to their career level. They are given adequate status with corresponding rights of participation. Through gradually increasing autonomy, they are empowered to shape their career.

Guideline 5: Dimensions of performance and assessment criteria

To assess the performance of researchers, a multidimensional approach is called for; in addition to academic and scientific achievements, other aspects may be taken into consideration. Performance is assessed primarily based on qualitative measures, while quantitative indicators may be incorporated into the overall assessment only with appropriate differentiation and reflection. Where provided voluntarily, individual circumstances stated in curricula vitae – as well as the categories specified in the German General Equal Treatment Act *(Allgemeines Gleichbehandlungsgesetz)* – are to be considered when forming a judgement.

Explanations:

High-quality research is oriented towards criteria specific to individual disciplines. In addition to the generation of and critical reflection on findings, other aspects of performance are taken into consideration in the evaluation process. Examples include involvement in teaching,

academic self-governance, public relations, and knowledge and technology transfer; contributions to the general good of society may also be recognized. An individual's approach to research, such as an openness to new findings and a willingness to take risks, is also considered. Appropriate allowance is made for periods of absence due to personal, family or health reasons or for prolonged training or qualification phases resulting from such periods, and for alternative career paths or similar circumstances.

Guideline 6: Ombudspersons

HEIs and non-HEI research institutions appoint at least one independent ombudsperson to whom their members and employees can turn with questions relating to good research practice and in cases of suspected misconduct. They take sufficient care to ensure that people are aware of who the ombudspersons at the institution are. For each ombudsperson there must be a designated substitute in case there is any concern about conflicts of interest or in case the ombudsperson is unable to carry out his or her duties.

Explanations:

Ombudspersons may not serve as members of a central governing body of their institutions while serving in this role. An ombudsperson has a set term of office. A further term of office is permissible. Researchers who are persons of integrity and who have management experience are eligible to be selected as ombudspersons. As neutral and qualified contact persons, they advise on issues relating to good research practice and in suspected cases of scientific misconduct and, where possible, contribute to solution-oriented conflict mediation. Ombudspersons maintain confidentiality in dealing with queries and, if necessary, notify the responsible body at their institution, normally an investigating committee, in the event of suspected cases of misconduct. HEIs and non-HEI research institutions give ombudspersons the support and acceptance they need to carry out their duties. Institutions may initiate additional measures to help facilitate the work of an ombudsperson. HEIs and non-HEI research institutions incorporate in their regulations a right of choice that enables members and employees to contact their institution's ombudsperson or the Ombuds Committee for Research Integrity in Germany (OWID). OWID is an independent body that provides advice and support on issues relating to good research practice and allegations of inappropriate conduct.

3.3 Research Process

Guideline 7: Cross-phase quality assurance

Researchers carry out each step of the research process *lege artis*. When research findings are made publicly available (in the narrower sense of publication, but also in a broader sense through other communication channels), the quality assurance mechanisms used are always explained. This applies especially when new methods are developed.

Explanations:

Continuous quality assurance during the research process includes, in particular, compliance with subject-specific standards and established methods, processes such as equipment calibration, the collection, processing and analysis of research data, the selection and use of research software, software development and programming, and the keeping of laboratory notebooks. If researchers have made their findings publicly available and subsequently become aware of inconsistencies or errors in them, they make the necessary corrections. If the inconsistencies or errors constitute grounds for retracting a publication, the researchers will promptly request the publisher, infrastructure provider, etc. to correct or retract the publication and make a corresponding announcement. The same applies if researchers are made aware of such inconsistencies or errors by third parties. The origin of the data, organisms, materials and software used in the research process is disclosed and the reuse of data is clearly indicated; original sources are cited. The nature and the scope of research data

generated during the research process are described. Research data are handled in accordance with the requirements of the relevant subject area. The source code of publicly available software must be persistent, citable and documented. Depending on the particular subject area, it is an essential part of quality assurance that results or findings can be replicated or confirmed by other researchers (for example with the aid of a detailed description of materials and methods).

Guideline 8: Stakeholders, responsibilities and roles

The roles and responsibilities of the researchers and research support staff participating in a research project must be clear at each stage of the project.

Explanations:

The participants in a research project engage in regular dialogue. They define their roles and responsibilities in a suitable way and adapt them where necessary. Adaptations are likely to be needed if the focus of a participant's work changes.

Guideline 9: Research design

Researchers consider and acknowledge the current state of research when planning a project. To identify relevant and suitable research questions, they familiarize themselves with existing research in the public domain. HEIs and non-HEI research institutions ensure that the necessary basic framework for this is in place.

Explanations:

Methods to avoid (unconscious) distortions in the interpretation of findings, e.g. the use of blinding in experiments, are used where possible. Researchers examine whether and to what extent gender and diversity dimensions may be of significance to the research project (regarding methods, work program, objectives, etc.). The context in which the research was conducted is taken into consideration when interpreting findings.

Guideline 10: Legal and ethical frameworks, usage rights

Researchers adopt a responsible approach to the constitutionally guaranteed freedom of research. They comply with rights and obligations, particularly those arising from legal requirements and contracts with third parties, and where necessary they seek approvals and ethics statements and present these when required. Regarding research projects, the potential consequences of the research should be evaluated in detail, and the ethical aspects should be assessed. The legal framework of a research project includes documented agreements on usage rights relating to data and results generated by the project.

Explanations:

Researchers maintain a continual awareness of the risks associated with the misuse of research results. Their responsibility is not limited to compliance with legal requirements but also includes an obligation to use their knowledge, experience and skills such that risks can be recognized, assessed and evaluated. They pay particular attention to the aspects associated with security-relevant research (dual use). HEIs and non-HEI research institutions are responsible for ensuring that their members' and employees' actions comply with regulations and promote this through suitable organizational structures. They develop binding ethical guidance and policies and define procedures to assess ethical issues relating to research projects. Where possible and practicable, researchers conclude documented agreements on usage rights at the earliest possible point in a research project. Documented agreements are especially useful when multiple academic and/or non-academic institutions are involved in a research project or when it is likely that a researcher will move to a different

institution and continue using the data they generated for their own research purposes. In particular, the researcher who collected the data is entitled to use them. During a research project, those entitled to use the data decide whether third parties should have access to them (subject to data protection regulations).

Guideline 11: Methods and standards

To answer research questions, researchers use scientifically sound and appropriate methods. When developing and applying new methods, they attach particular importance to quality assurance and the establishment of standards.

Explanations:

The application of a method normally requires specific expertise that is ensured, where necessary, by suitable cooperative arrangements. The establishment of standards for methods, the use of software, the collection of research data and the description of research results is essential for the comparability and transferability of research outcomes.

Guideline 12: Documentation

Researchers document all information relevant to the production of a research result as clearly as is required by and is appropriate for the relevant subject area to allow the result to be reviewed and assessed. In general, this also includes documenting individual results that do not support the research hypothesis. The selection of results must be avoided. Where subject-specific recommendations exist for review and assessment, researchers create documentation in accordance with these guidelines. If the documentation does not satisfy these requirements, the constraints and the reasons for them are clearly explained. Documentation and research results must not be manipulated; they are protected as effectively as possible against manipulation.

Explanations:

An important basis for enabling replication is to make available the information necessary to understand the research (including the research data used or generated, the methodological, evaluation and analytical steps taken, and, if relevant, the development of the hypothesis), to ensure that citations are clear, and, as far as possible, to enable third parties to access this information. Where research software is being developed, the source code is documented.

Guideline 13: Providing public access to research results

As a rule, researchers make all results available as part of scientific/academic discourse. In specific cases, however, there may be reasons not to make results publicly available (in the narrower sense of publication, but also in a broader sense through other communication channels); this decision must not depend on third parties. Researchers decide autonomously – with due regard for the conventions of the relevant subject area – whether, how and where to disseminate their results. If it has been decided to make results available in the public domain, researchers describe them clearly and in full. Where possible and reasonable, this includes making the research data, materials and information on which the results are based, as well as the methods and software used, available and fully explaining the work processes. Software programmed by researchers themselves is made publicly available along with the source code. Researchers provide full and correct information about their own preliminary work and that of others.

Explanations:

In the interest of transparency and to enable research to be referred to and reused by others, whenever possible researchers make the research data and principal materials on which a

publication is based available in recognized archives and repositories in accordance with the FAIR principles (**F**indable, **A**ccessible, **I**nteroperable, **R**eusable). Restrictions may apply to public availability in the case of patent applications. If self-developed research software is to be made available to third parties, an appropriate license is to be provided. In line with the principle of "quality over quantity", researchers avoid splitting research into inappropriately small publications. They limit the repetition of content from publications of which they were (co-)authors to that which is necessary to enable the reader to understand the context. They cite results previously made publicly available unless, in exceptional cases, this is deemed unnecessary by the general conventions of the discipline.

Guideline 14: Authorship

An author is an individual who has made a genuine, identifiable contribution to the content of a research publication of text, data or software. All authors agree on the final version of the work to be published. Unless explicitly stated otherwise, they share responsibility for the publication. Authors seek to ensure that, as far as possible, their contributions are identified by publishers or infrastructure providers such that they can be correctly cited by users.

Explanations:

The contribution must add to the research content of the publication. What constitutes a genuine and identifiable contribution must be evaluated on a case-by-case basis and depends on the subject area in question. An identifiable, genuine contribution is deemed to exist particularly in instances in which a researcher – in a research-relevant way – takes part in

- the development and conceptual design of the research project, or
- the gathering, collection, acquisition or provision of data, software or sources, or
- the manuscript analysis/evaluation or interpretation of data, sources and conclusions drawn from them, or
- the drafting of the manuscript.

If a contribution is not sufficient to justify authorship, the individual's support may be properly acknowledged in footnotes, a foreword or an acknowledgement. Honorary authorship where no such contribution was made is not permissible. A leadership or supervisory function does not constitute co-authorship. Collaborating researchers agree on authorship of a publication. The decision as to the order in which authors are named is made in good time, normally no later than when the manuscript is drafted, and in accordance with clear criteria that reflect the practices within the relevant subject areas. Researchers may not refuse to give their consent to publication of the results without sufficient grounds. Refusal of consent must be justified with verifiable criticism of data, methods or results.

Guideline 15: Publication medium

Authors select the publication medium carefully, with due regard for its quality and visibility in the relevant field of discourse. Researchers who assume the role of editor carefully select where they will carry out this activity. The scientific/academic quality of a contribution does not depend on the medium in which it is published.

Explanations:

In addition to publication in books and journals, authors may also consider academic repositories, data and software repositories, and blogs. A new or unknown publication medium is evaluated to assess its seriousness. A key criterion to selecting a publication medium is whether it has established guidelines on good research practice.

Guideline 16: Confidentiality and neutrality of review processes and discussions

Fair behavior is the basis for the legitimacy of any judgement-forming process. Researchers who evaluate submitted manuscripts, funding proposals or personal qualifications are obliged to maintain strict confidentiality regarding this process. They disclose all facts that could give rise to the appearance of a conflict of interest. The duty of confidentiality and disclosure of facts that could give rise to the appearance of a conflict of interest also applies to members of research advisory and decision-making bodies.

Explanations:

The confidentiality of third-party material to which a reviewer or committee member gains access precludes sharing the material with third parties or making personal use of it. Researchers immediately disclose to the responsible body any potential or apparent conflicts of interest, bias or favoritism relating to the research project being reviewed or the person or matter being discussed.

Guideline 17: Archiving

Researchers back up research data and results made publicly available, as well as the central materials on which they are based and the research software used by adequate means according to the standards of the relevant subject area and retain them for an appropriate period. Where justifiable reasons exist for not archiving particular data, researchers explain these reasons. HEIs and non-HEI research institutions ensure that the infrastructure necessary to enable archiving is in place.

Explanations:

When scientific and academic findings are made publicly available, the research data (generally raw data) on which they are based are generally archived in an accessible and identifiable manner for a period of ten years at the institution where the data were produced or in cross-location repositories. This practice may differ depending on the subject area. In justified cases, shorter archiving periods may be appropriate; the reasons for this are described clearly and comprehensibly. The archiving period begins on the date when the results are made publicly available.