

# Integrated data deposition at submission

A new pilot scheme at *Nature Energy* will enable authors to put data into a repository as part of their manuscript submission process.

It's hard to overstate the value of research data. They form the core around which research papers are built; they allow us to build and expand upon earlier work; and they support replication and reproducibility efforts. Understanding how to collect and analyse data is a central component of academic training. Knowing how to manage and share it post-publication is becoming an ever more important aspect, too.

Funders are recognizing the value of data and expanding their policies to include explicit consideration of data and its management. A landmark policy from the US National Institutes of Health will require its grant recipients to include data-management plans in applications from January 2023, and to then make their data public. While readers of this journal may not be directly impacted by this policy, it sends clear signals about the growing importance of data to funders and the direction we should be heading: data management should be considered from the conception of a research project to beyond its completion.

This message is appreciated among research communities. [The State of Open Data 2021](#) report highlighted three key findings from its survey. First, there is more concern than ever before about sharing data. This includes concerns about data misuse and lack of credit for sharing data. Researchers are motivated to share data to increase citations to and visibility of their work, but often feel that such activities are overlooked by institutions.

Second, there is increased familiarity and compliance with FAIR (findable, accessible, interoperable, and reusable) data principles than previously. Finally, respondents rely on repositories, publishers and institutional libraries to support them in making their data openly available.

This month, *Nature Energy* joined a pilot scheme along with three other Nature Portfolio journals (*Nature Chemistry*, *Nature Ecology & Evolution*, and *Nature Neuroscience*) to try to provide help for our authors to share their data from submission through to publication. In partnership with [figshare](#), we will be offering authors the option to put the data supporting their paper into a figshare repository as an integrated part of our submissions workflow.

This system will provide authors, editors and peer reviewers access to a private repository during consideration of a manuscript. We hope this will facilitate greater scrutiny of data pre-publication, improving the eventual strength of a paper but also the usefulness of shared data post-publication. It also allows us to build in data management as a part of manuscript development rather than only at the end, as is often the case now. The integration will also ease the public sharing of data by making it available at the point the paper is published.

Authors will still retain control of their data, though. If a manuscript is not accepted for publication, authors will have the option to keep the data in figshare or

have it removed. More information on how the figshare integration works can be found at <https://www.springernature.com/gp/authors/research-data/figshare-integration>.

The pilot scheme builds on [earlier initiatives and policies](#) at Nature Portfolio journals designed to enhance reproducibility and reuse of data. At *Nature Energy*, we have long sought to encourage authors to share their data. Recently, we expanded our policy on data availability statements, requesting they be added at the point of submission and that at a minimum, where data cannot be shared, they explain why that is the case. We also encourage authors to think carefully about data presentation in their figures, including how averages and error bars are presented in view of the number of replicates.

We believe that sharing data enhances the scientific process, increasing trust in research outputs and facilitating further discovery. By offering integrated data deposition at submission, we hope to support good data sharing practices and — perhaps most importantly — make such practices easier. We thus encourage authors submitting to us to make use of this service, to help test it out, and to provide us with their feedback. If successful, we hope it can be provided as a permanent feature and deployed to other Nature Portfolio journals. □

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