

Open Science Monitoring

Access essential data for tracking the adoption of Open Access and Open Science policies across the European Union, as well as within countries and organisations.

The OpenAIRE Graph goes **beyond publications**, also including research data, software, and other outputs along with their citations.

101 K
Data Sources

256 Mi
Works

175 Mi
Pubs

363 K
Software

60 Mi
Datasets

2.4 Bi
Citations

Enhanced Accuracy: Deduplication prevents citations from being counted multiple times across different versions of the same article, ensuring accurate Open Science reports.

Comprehensive Data Collection: We gather information from a multitude of research products beyond just publications, such as datasets and software, to provide a holistic view of the research landscape.

Persistent Identifiers: PIDs ensure consistent tracking and monitoring of research products over time.

FAIR-ness: The OpenAIRE Graph by design is FAIR, meaning that it is Findable, Accessible, Interoperable, and Reusable

Complete Metadata: The Graph aims to be as complete as possible, collecting from all sources relevant to science. These include data from big players such as

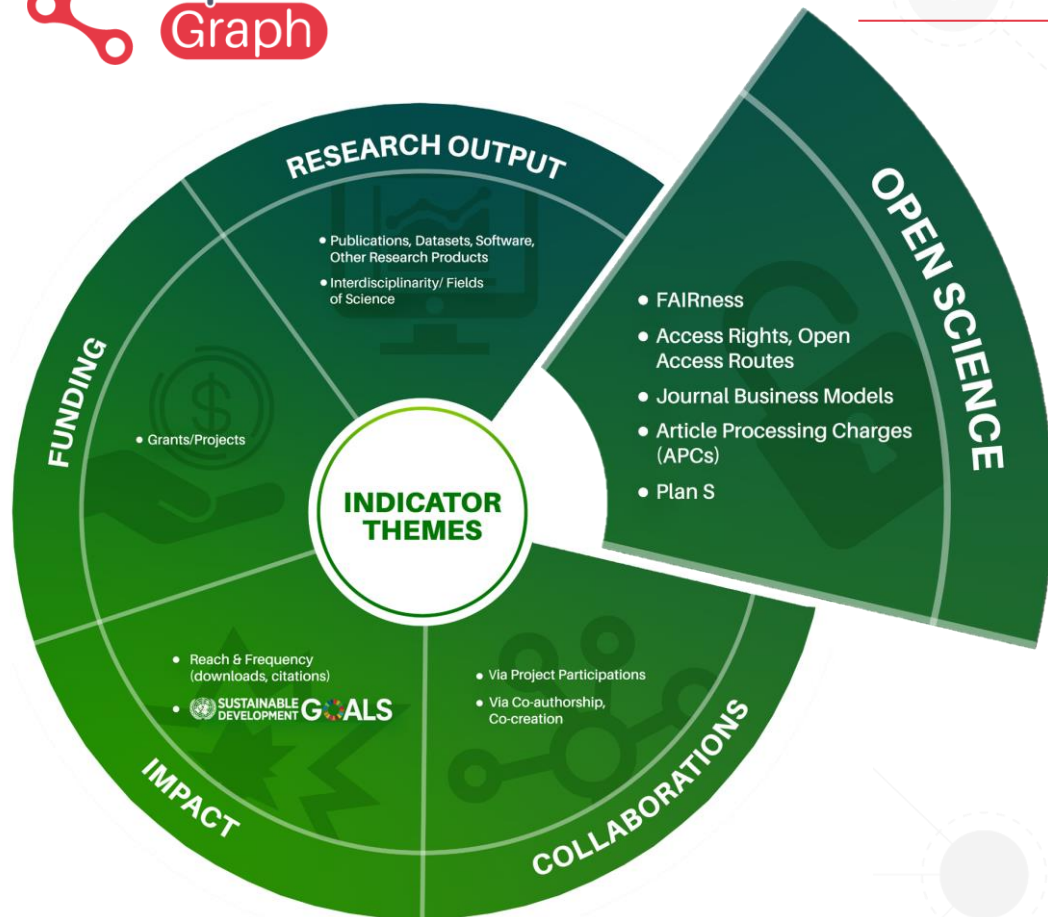




Open Access Indicators for Organisations: Assign each organisation a percentage value that represents the proportion of their projects which are Open Access.



Open Access Models Indicators: Identify outputs published under certain Open Access models (green, bronze, gold, hybrid, or diamond).



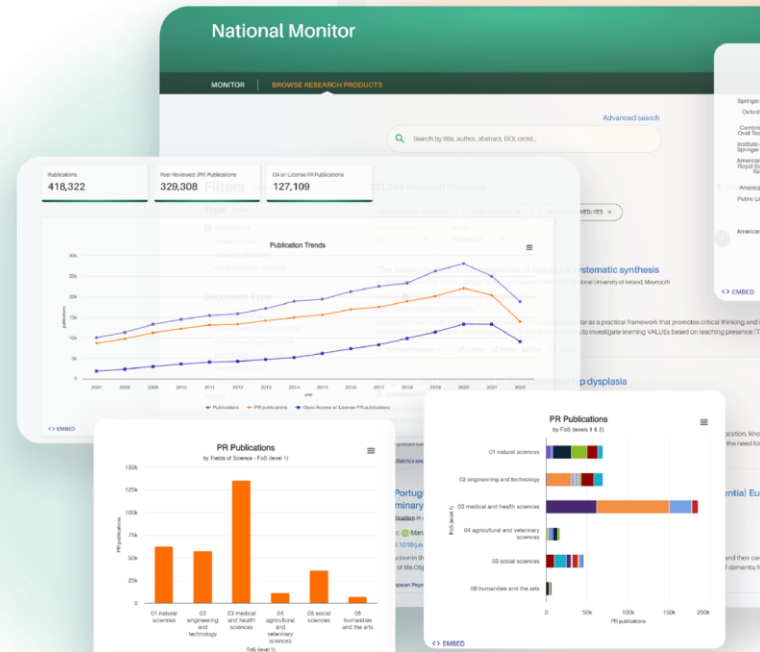
Other **indicators** that support Open Science Monitoring

Visualise the Graph's data on the impact of your organisation in the research ecosystem via [OpenAIRE MONITOR](#).

... No technical background or powerful computing infrastructure needed!

The [Irish National Open Access Monitor](#) example.

Supporting the nation's shift towards Irish scholarly research communication output transparency and accessibility, aimed at being 100% Open Access.



Get a bird's eye view of the European Open Science landscape and the uptake of OS in your country. Identify gaps, trends, collaboration patterns, and weak spots for better informed decision-making, all with the [Open Science Observatory](#)

... No technical background or powerful computing infrastructure needed!





Use OpenAIRE Graph for OS Monitoring

Do you have technical expertise?

Access the OpenAIRE Graph dataset through [OpenAIRE API](#) for your bibliometric analysis.

Download the [Graph dataset](#) on [Zenodo](#) to explore and process bibliometric data

Note: While the dataset is open and free to all, it requires a significant amount of processing power to handle the entirety of its data. If you don't possess such capacities, you can access parts of the Graph via the [Beginner Kits](#).

The screenshot shows the Zenodo page for the 'OpenAIRE Graph Beginner's Kit Dataset'. The page header includes the Zenodo logo and navigation links. The main content area features a title, a list of authors, and a detailed description of the dataset. On the right side, there are statistics for '669 NEWS' and '272 DOWNLOADS', along with a 'Versions' section showing 'Version 2.0.0' and 'Version 1.0.0'. The 'External resources' section lists 'Indexed in' and 'OpenAIRE'. The 'Communities' section lists 'OpenAIRE'.

zenodo OpenAIRE Graph Beginner's Kit Dataset

669 NEWS 272 DOWNLOADS

OpenAIRE Graph Beginner's Kit Dataset

Baglioni, Miriam; Altort, Claudio; Barzi, Alessia; Biondi, Giambattista; La Bruzzo, Sandro; Menghi, Paolo; Dimitropoulos, Hany; Marmiroli, Andrea; Foudakis, Ioanna; Horst, Maria; De Siani, Michela; Arini, Michele; Vergada, Flaminio; Chatzigeorgidis, Sotirios; Panatier, Olivier; Luppino, Ivano; Coriak, Andrei; Schwegler, Julian; Iannidis, Alexandros; Iliopoulou, Katerina; Kokkogiannaki, Argiro

The OpenAIRE Graph is an Open Access dataset containing metadata about research products (literature, datasets, software, etc.) linked to other entities of the research ecosystem: the organisations, project grants, and data sources.

The large size of the OpenAIRE Graph is a major requirement for beginners to familiarise with the underlying data model and explore its contents. Working with the Graph in its full size typically requires access to a huge distributed computing infrastructure which cannot be easily accessible to everyone.

The OpenAIRE Beginner's Kit aims to address this issue. It consists of two components:

- A subset of the OpenAIRE Graph composed of the research products published between 2020-12-28 and 2023-07-31, all the entities connected to them and the respective relationships. The subset is composed of the following parts:
 - `publications.tar`: metadata records about research literature (includes types of publications listed here)
 - `dataset.tar`: metadata records about research data (includes the subtypes listed here)
 - `software.tar`: metadata records about research software (includes the subtypes listed here)
 - `other-research-product.tar`: metadata records about research products that cannot be classified as research literature, data or software (includes types of products listed here)
 - `organisations.tar`: metadata records about organisations involved in the research life-cycle, such as universities, research organisations, funders, journals, aggregators, funder organisations.
 - `data-sources.tar`: metadata records about data sources whose content is available in the OpenAIRE Graph. They include institutional and thematic repositories.
 - `project.tar`: metadata records about project grants.
 - `relation.tar`: metadata records about relations between entities in the graph.
 - `communities_infrastructures.tar`: metadata records about research communities and research infrastructures
- Each file is a tar archive containing gz files, each with one json per line. Each json is compliant to the schema available at <http://doi.org/10.5281/zenodo.8238674>.
- The code to analyse the data. It is available on GitHub. Just download the archive, unzip/unrar it and follow the instruction on the README file (no need to clone the GitHub repository).



OpenAIRE
Graph

Stay in touch

Helpdesk

Your go-to for personalised technical support and service assistance



graph.openaire.eu/helpdesk



helpdesk@openaire.eu

User Forum

A space for Graph users to discuss functionalities, share insights, ask questions, and learn together



openaire.flarum.cloud