

# Data sharing and the post-2020 framework

Tim Hirsch, Deputy Director, GBIF



# WHAT IS GBIF?

Intergovernmental network  
and data infrastructure

Provides anyone,  
anywhere, free and open  
access to data about all  
types of life on Earth

Voluntary collaboration  
through Memorandum of  
Understanding

Participant nodes,  
Secretariat in Copenhagen,  
DK

GBIF | Global Biodiversity Information Facility

## Free and open access to biodiversity data

OCCURRENCES SPECIES DATASETS PUBLISHERS RESOURCES

Search

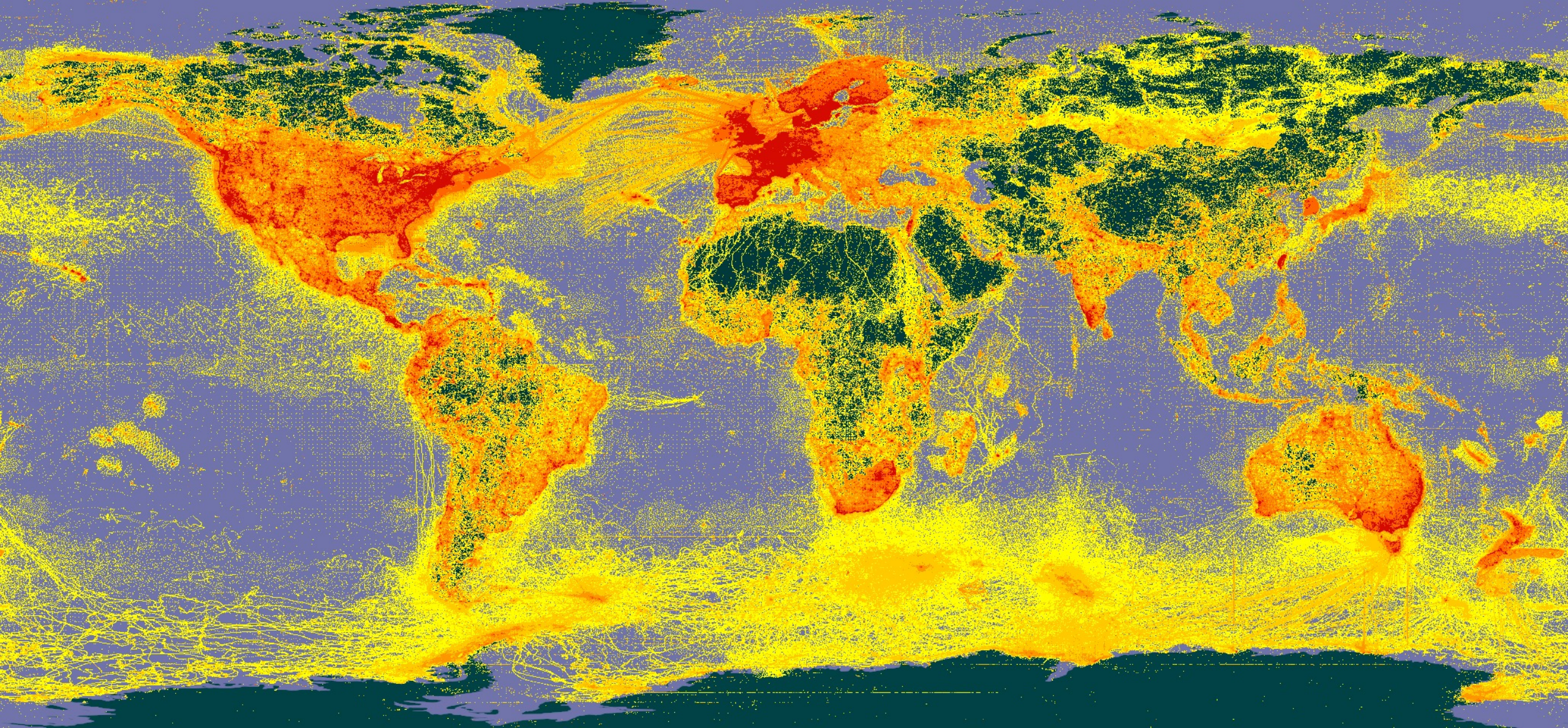
WHAT IS GBIF?

Amphiprion melanopus Bleeker, 1857 observed in Shefa, Vanuatu

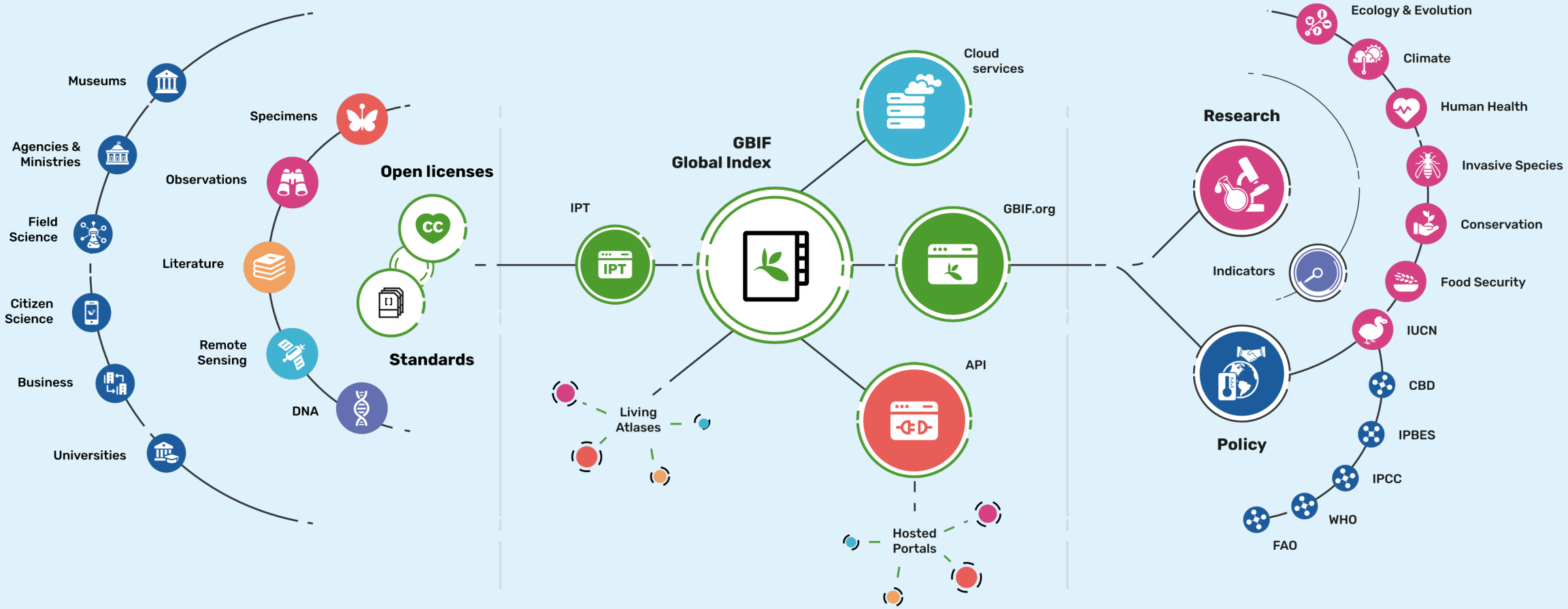
Occurrence records 1,901,537,713	Datasets 63,554	Publishing institutions 1,760	Peer-reviewed papers using data 6,429
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- News:** Call for data papers describing datasets on vectors of human diseases
- News:** Contractor sought to support mobilization of biodiversity data related to human health
- Event:** Impact and Action: A Virtual Science-Policy Symposium (09 Dec 2021)
- News:** The Amazon Cooperation Treaty Organization joins GBIF as a Participant
- Blog:** How does the GBIF data-clustering feature work?
- News:** First five hosted portals emerge from GBIF pilot programme
- News:** Biodiversity Information Fund for Asia funds 12 new projects
- Blog:** Beginner's guide to the GBIF API

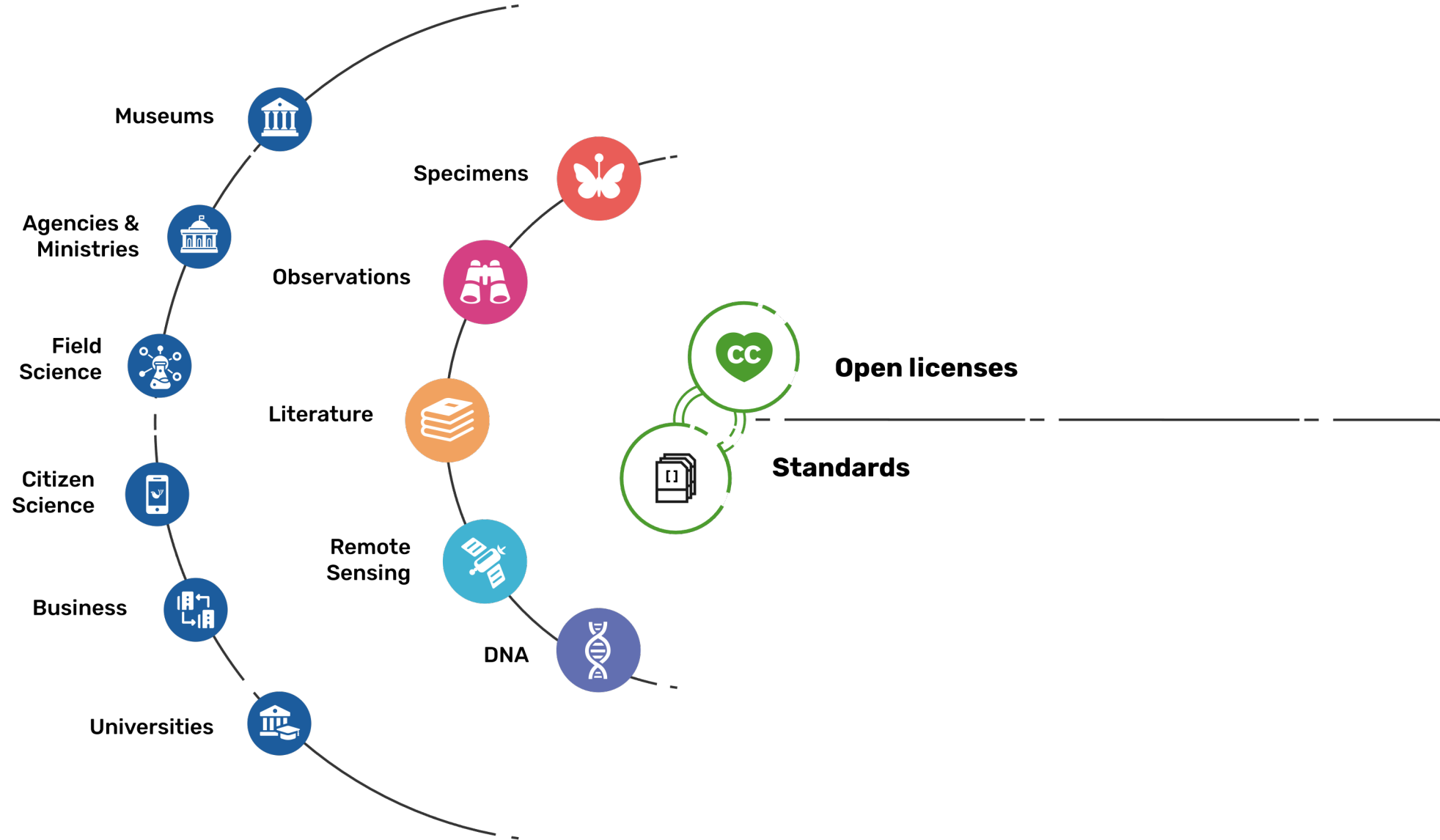
**DATA FROM THE GBIF NETWORK** 30 Sept 2021



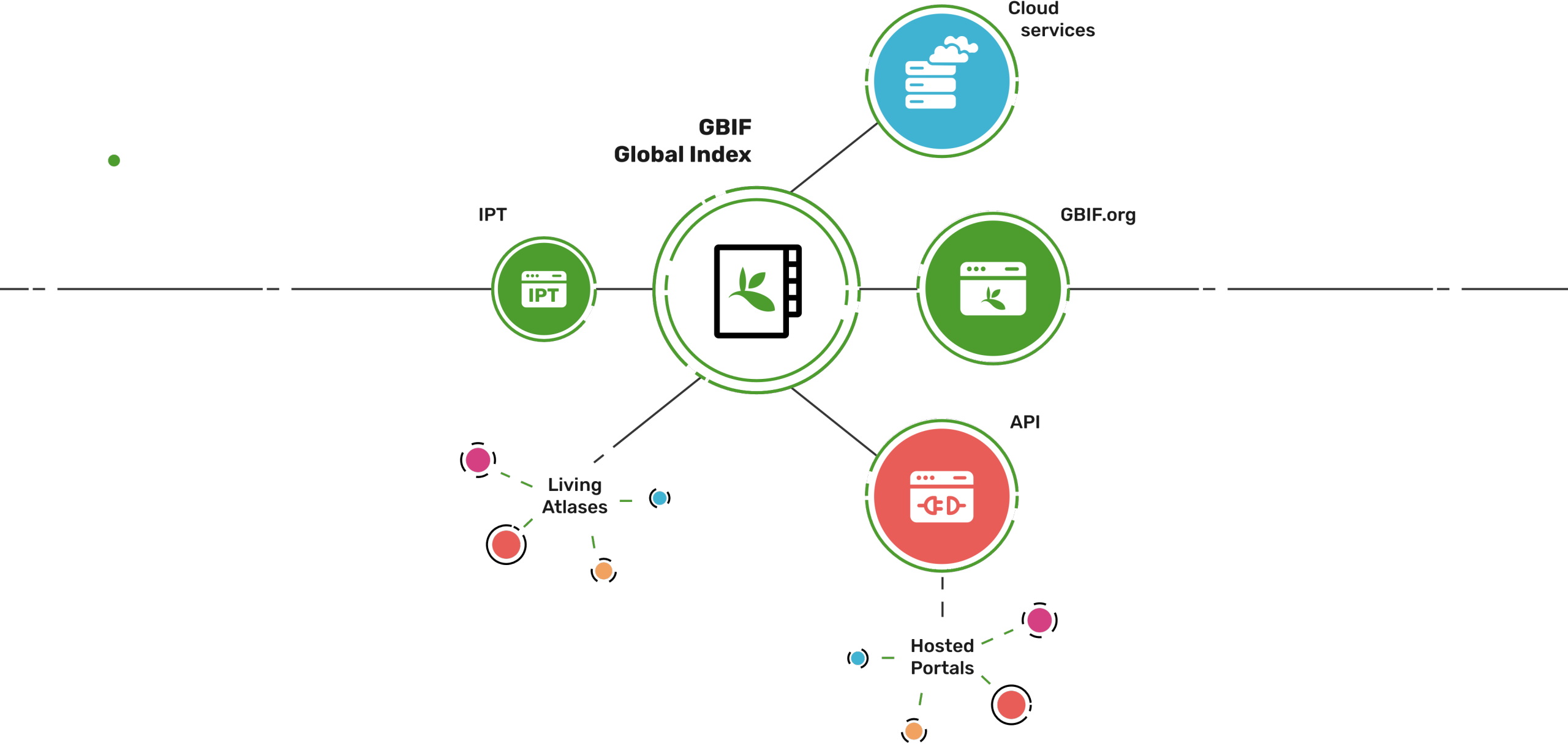
# PROVIDING BIODIVERSITY EVIDENCE FOR RESEARCH AND POLICY



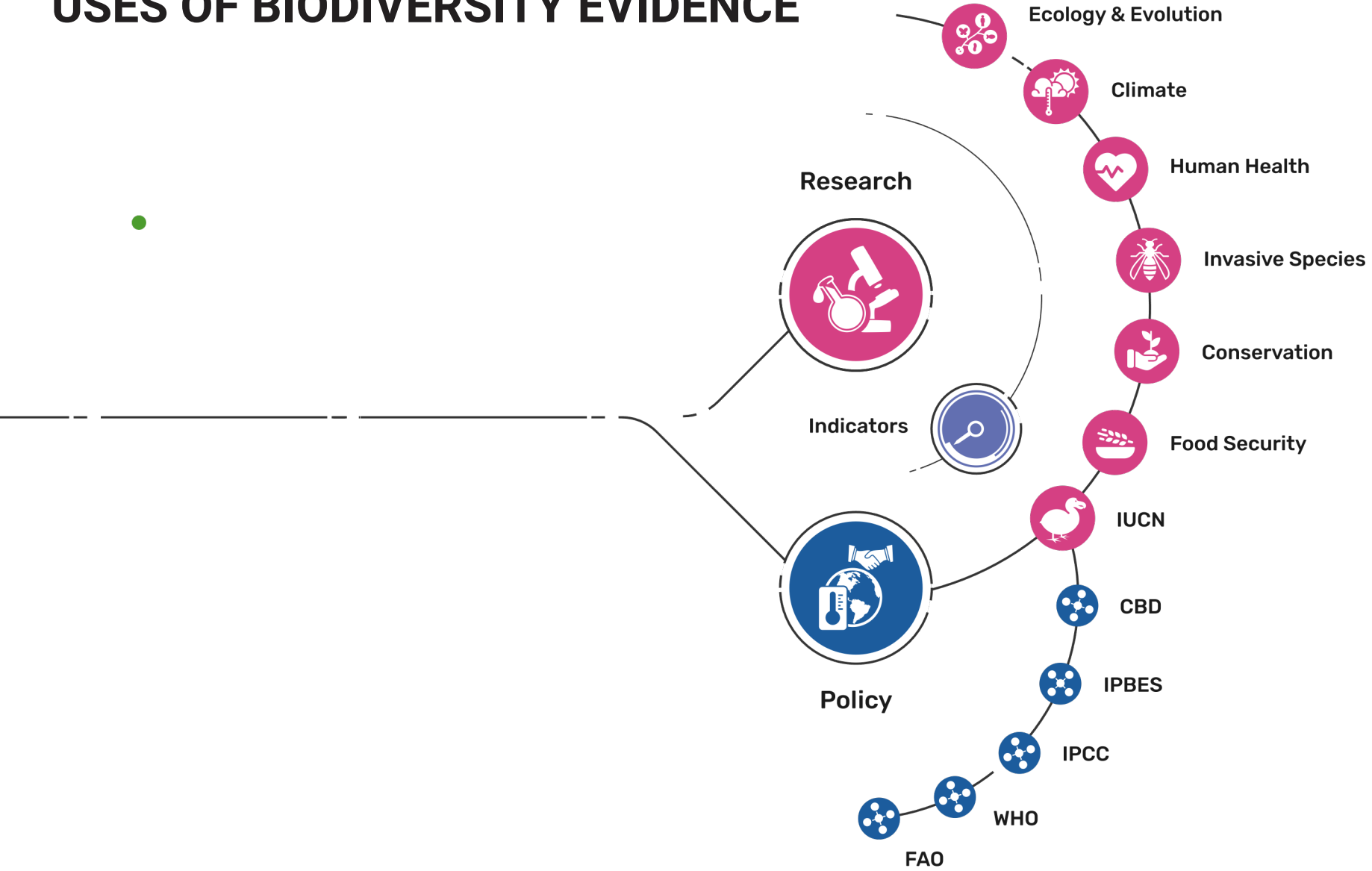
# SOURCES OF BIODIVERSITY EVIDENCE



# ACCESS TO BIODIVERSITY EVIDENCE



# USES OF BIODIVERSITY EVIDENCE



# RESEARCH USES OF DATA FROM THE GBIF NETWORK



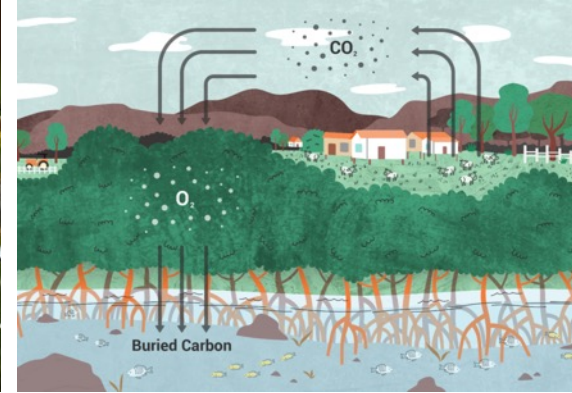
## Conservation

- Protected areas
- Key biodiversity areas
- Threatened species
- Monitoring and targeting invasive species



## Food security

- Crop wild relatives
- *In situ* and *ex situ* conservation of genetic diversity
- Pollination by wild species
- Fisheries planning



## Climate change

- Modelling impacts on species ranges
- Adaptation strategies
- Mitigation benefits, risks



## Human health

- Tracking disease risk based on shifting distribution of vectors, hosts and reservoirs
- Medicinal plants
- Hazards e.g. snakebite

# POLICY APPLICATIONS OF GBIF-MEDIATED DATA



## Biodiversity indicators

Critical role in generating information resources that guide the decision-making processes

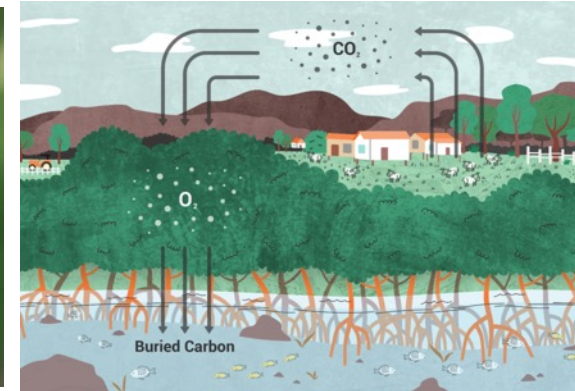
- Aichi 19, 5, 9 & 11-13
- SDGs 14 & 15
- Post-2020 GBF



## Underlying research

Increased data supports 1st global assessment of climate impacts on insects—and then supports IPCC 2018 *Special Report on 1.5°C*

[gbif.org/data-use/51171KRV0EhwmHubpfDs3h](https://gbif.org/data-use/51171KRV0EhwmHubpfDs3h)



## Knowledge generation

Support **IUCN** knowledge products, including those that feed into **IBAT**

- Red List of Threatened Species
- Key Biodiversity Areas

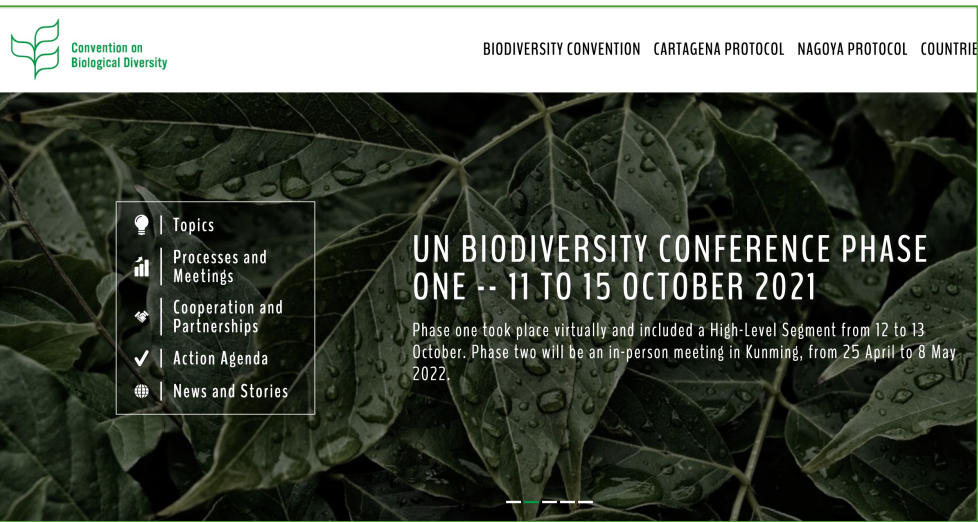


## Targeted mobilization

Supporting campaigns to publish “data papers” to improve coverage

- Geographic (Russia)
- Taxonomic (vectors)
- Thematic (soil)

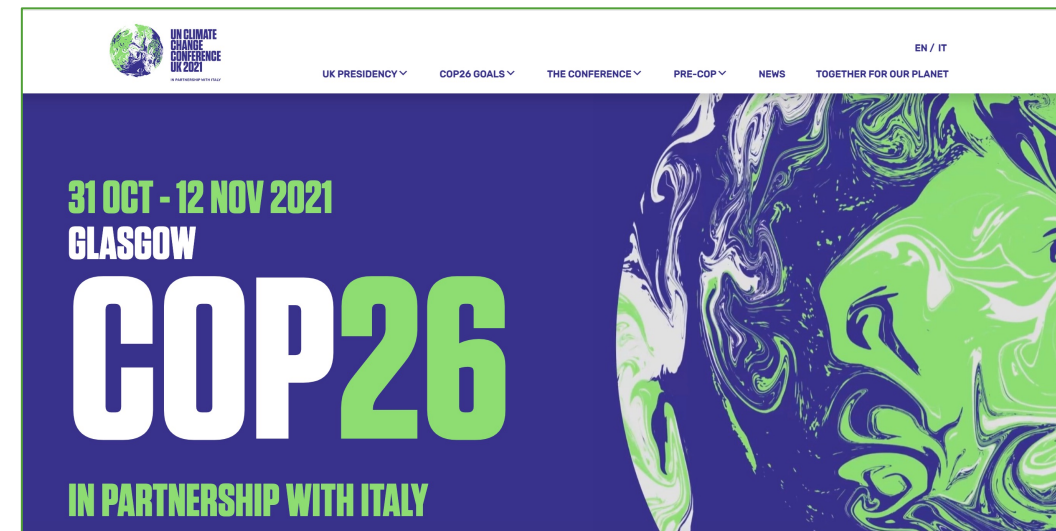
# PROVIDING DATA TO TRACK GLOBAL COMMITMENTS



Relevant targets/processes in Global Biodiversity Framework 1st draft:

- Target 20 on availability and application of knowledge/data
- Target 15 on reporting of business impacts
- Draft monitoring framework (indicators)
- Draft knowledge management component

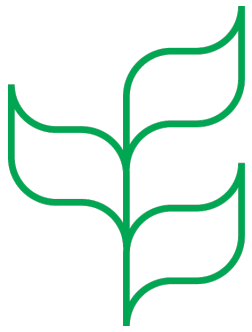
- **Glasgow Climate Pact:** *Emphasizes the importance of protecting, conserving and restoring nature and ecosystems to achieve the Paris Agreement temperature goal, including through forests and other terrestrial and marine ecosystems acting as sinks and reservoirs of greenhouse gases and by protecting biodiversity, while ensuring social and environmental safeguards (para 38)*
- **Joint Nature Statement by Multilateral Development Banks (MDB):** *We will encourage our public and private sector borrowers to share and exchange biodiversity information through online data portals [such as the Global Biodiversity Information Facility (GBIF) <https://www.gbif.org/>] to better inform mainstreaming, project design, and decision-making processes (para 1.20).*



# BENEFITS OF BIODIVERSITY DATA SHARING FROM THE PRIVATE SECTOR

- Meets commitments on environmental and social governance
- Fills data gaps in data-poor regions
- Improves transparency and quality of impact assessment
- Saves long-term costs by providing baseline data for future assessment needs

The screenshot shows a GBIF dataset page for "Marine Mammal Observation - Total E&P Angola 2006-2011". The page includes a navigation bar with links for "Get data", "How-to", "Tools", "Community", and "About". The dataset title is prominently displayed, along with the publisher "TotalEnergies" and the author "Sowulewska J". Key statistics are shown: 324 occurrences and 16 citations. A description states that the data was collected between 2006 and 2011 in offshore Angola. Metadata includes the publication date (September 5, 2019), last modified date (September 5, 2019), host (GBIF France), and license (CC BY-NC 4.0). A DOI link is provided for citation. Below the metadata, four progress indicators show 100% completion for "Occurrences", "With taxon match", "With coordinates", and "With year". The main content area features a map titled "324 GEOREFERENCED RECORDS" showing a cluster of yellow dots in the offshore waters of Angola. A date range filter is set to "Any year" (2006 - 2011). The page footer includes a copyright notice and a link to "EXPLORE AREA".

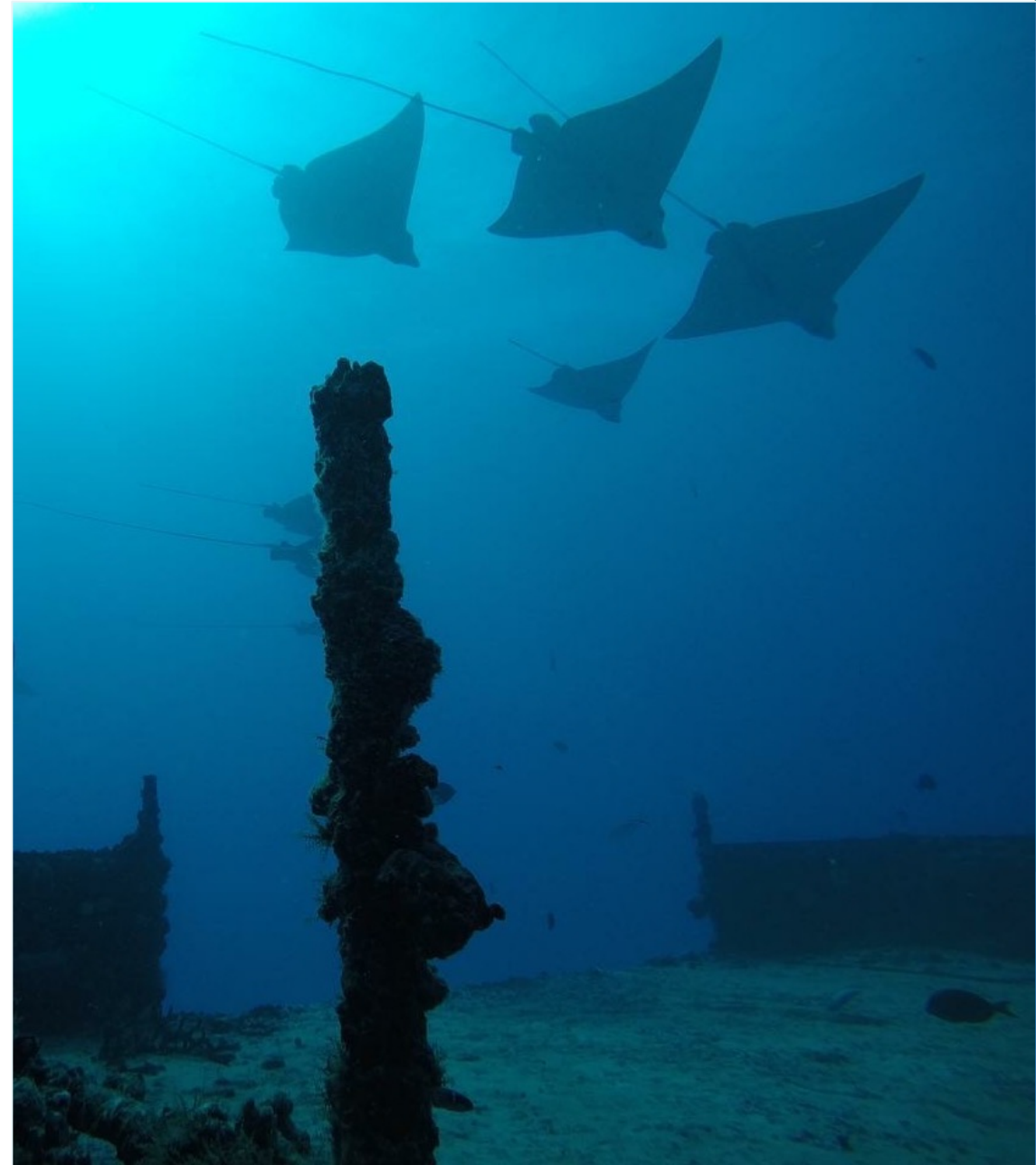


## Convention on Biological Diversity



“Biodiversity data generated in the course of environmental impact assessments (EIAs) are potentially valuable sources of evidence for reuse in research and subsequent development decisions...National and subnational regulators can help unlock such data by requiring developers to publish them using standard open data formats, as part of the planning approval process.”

—Guidance Adopted by the Conference of the Parties, XIII/31: Annex (13 Dec 2016)





# EQUATOR PRINCIPLES



“The EPFI will encourage the client to **share commercially non-sensitive Project-specific biodiversity data** with the Global Biodiversity Information Facility (GBIF) and relevant national and global data repositories, using formats and conditions to enable such data to be accessed and re-used in future decisions and research applications”

—EP4, Principle 10

Get data How-to Tools Community About kylecopas

NEWS | 3 DECEMBER 2019

## The Equator Principles encourage open access to environmental impact data through the GBIF network

*Update to risk management framework adopted by financiers and advisors of large-scale projects promotes transparency through sharing of non-sensitive biodiversity data*

Panorama, Tom Price: mining town in Pilbara, Western Australia. Photo 2014 by Robyn Jay, via Flickr, licensed under CC BY-SA 2.0.

The latest update to the [Equator Principles](#) urges developers of large infrastructure and industrial projects to share non-sensitive biodiversity data from environmental impact assessments into the GBIF network. With the Principles' history of enhancing environmental and social responsibility around other management practices in the financial sector and banking industry, this new guidance could lead to a significant increase in the availability of primary biodiversity data available from the private sector.

The Equator Principles are a voluntary, structured reporting framework that gives financial institutions and their clients a common baseline for identifying, assessing and managing environmental and social risks. Originally linked to environmental and social policy frameworks established by the [World Bank Group's International Finance Corporation](#), the Principles serve a common minimum standard for due diligence and responsible risk decision-making.

"The new recommendations in the Equator Principles mark an important milestone for demonstrating the benefit of open biodiversity data to private companies around the world," said Joe Miller, Executive Secretary of GBIF. "Shared environmental data can greatly increase transparency and reduce duplication



## MOTION 77

1. CALLS ON Commissions, Members and the global community of *in-situ* data collectors to:

”

a. **consider these data as a public good** for the planet and an invaluable resource to manage, benefit and conserve wildlife for the benefits of nature and people;

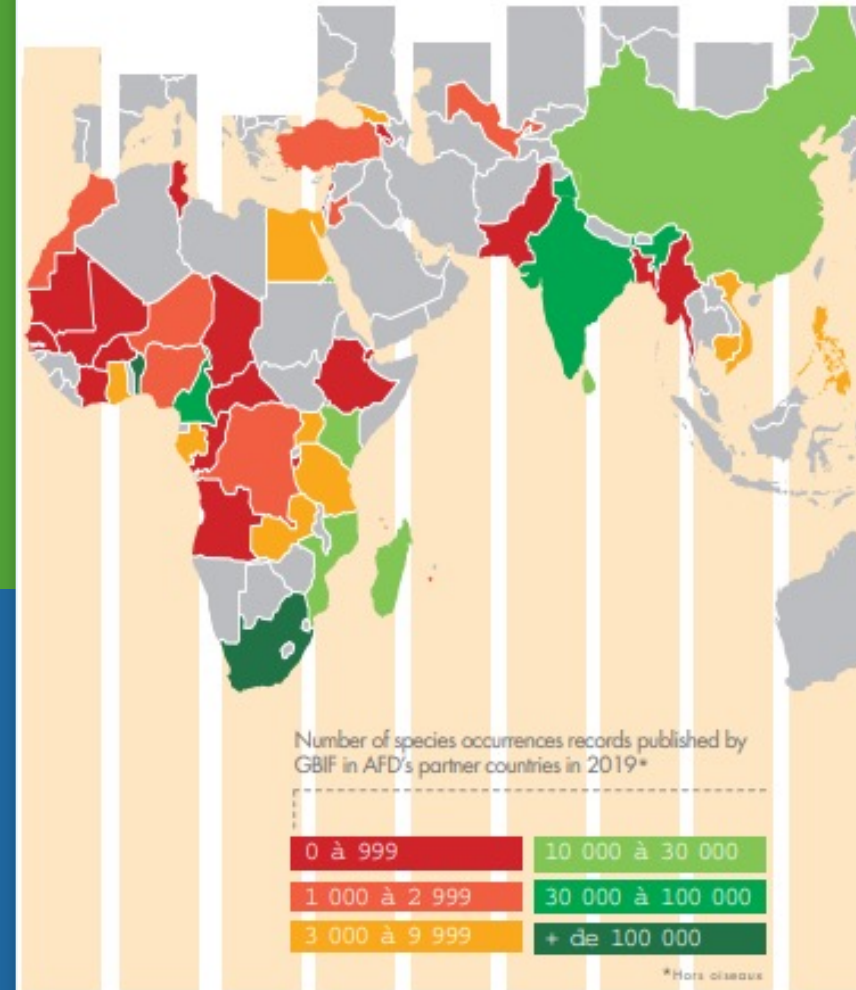
”

b. readily **deposit these data in globally available repositories** and platforms, or public national biodiversity repositories;

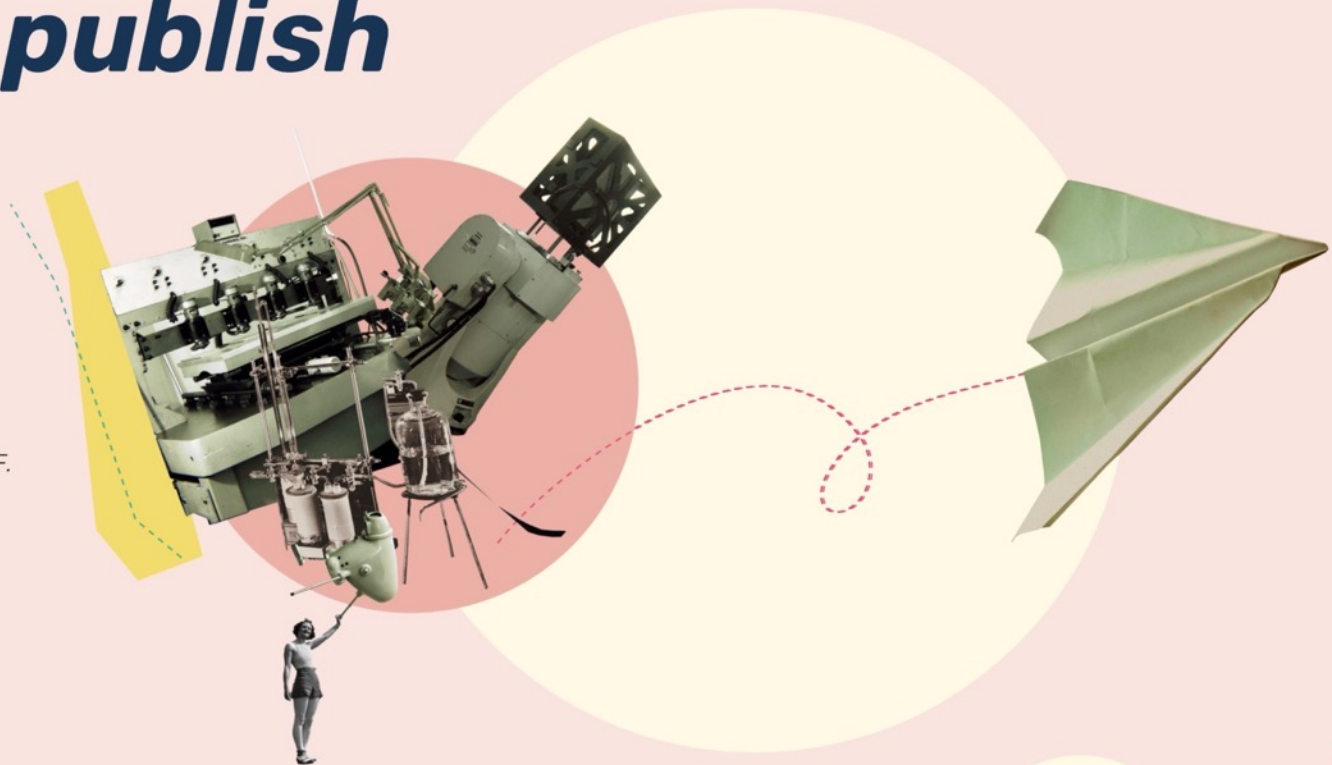
# DATA4NATURE: SHARE TO PROTECT



- Initiative with public development banks led by GBIF and initiated by AFD
- Impact assessment data from six major PDBs could increase annual data totals in GBIF by **15% in Africa** and **40% in Asia**
- Included in CBD SBI recommendations to COP15
- Public launch planned for Q1 2022



# How to publish data?



## 1 Register

Register your company to join GBIF.



## 2 Adapt

Adapt your data to the Darwin Core standard (DwC) and validate your datasets



## 3 Choose

Assign a Creative Commons license



## 4 Upload

Use the Integrated Publishing Toolkit (IPT) to upload your datasets



## 5 Create

Use the GBIF Metadata Profile to create metadata. Upload it to the IPT.



## 6 Publish

## 6 Publish

A DwC file will be automatically generated. Contact GBIF to review the process.



## 7 View

You'll get a link to access your published data.

# THANK YOU!

[thirsch@gbif.org](mailto:thirsch@gbif.org)

