

How GBIF can drive Digital Environmental Impact Assessment ?



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Datasets ●
122,120

● Hosted portals
71

● Peer-review papers
using data (1 Oct 2025)
14,415

● Average records
downloaded per month (2025)
297 billion

● Species
occurrence records
3,687,781,660

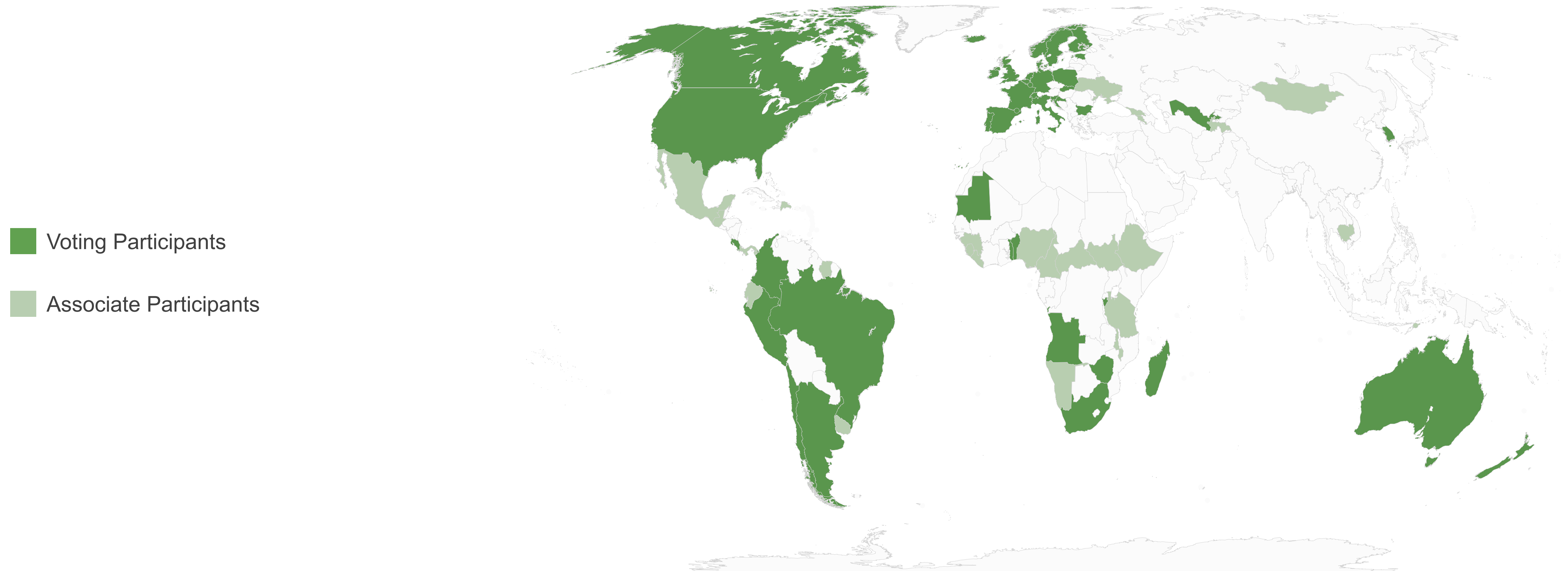
Publishers ●
2,693

Country
Participants ●
69

Organizational
Participants ●
42



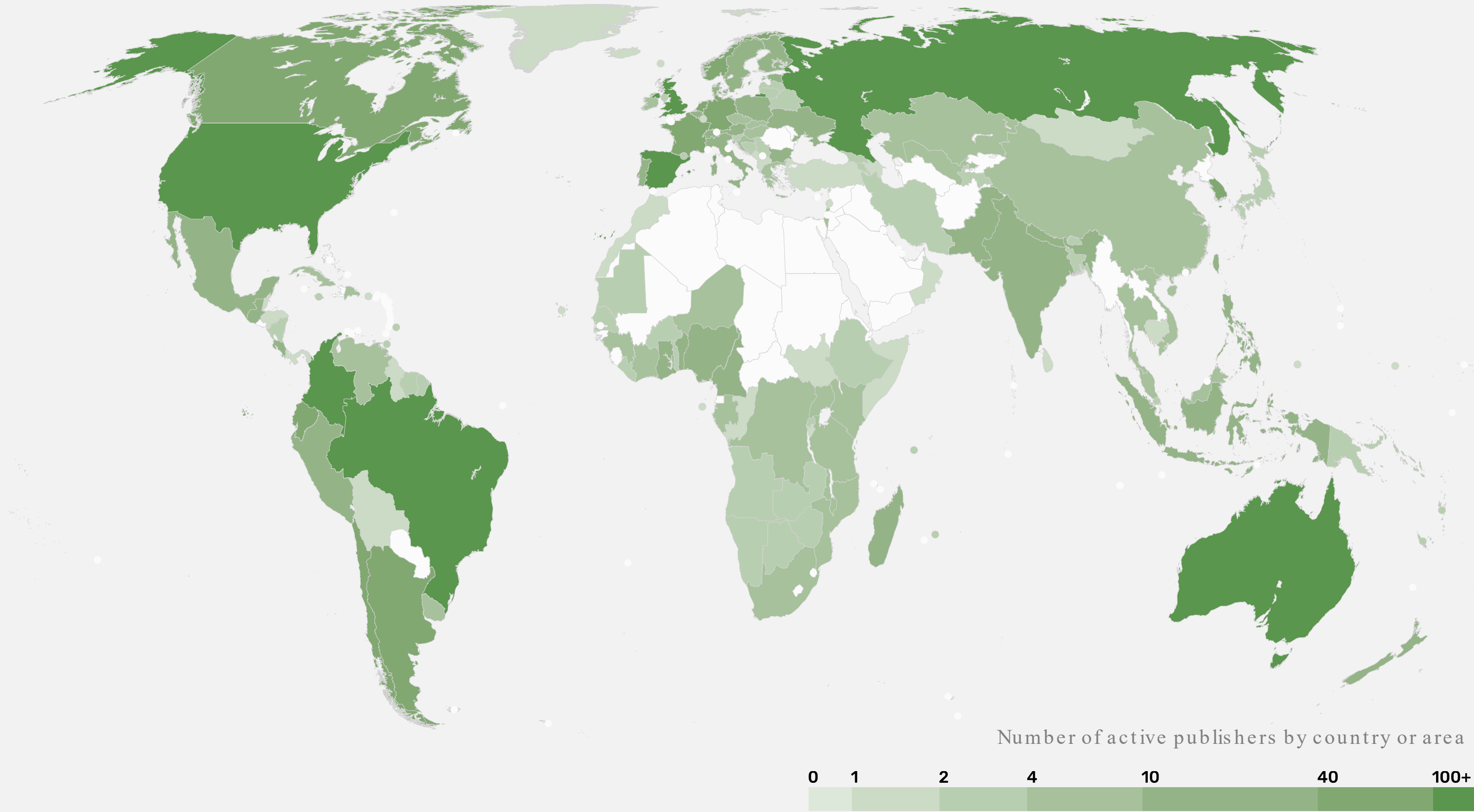
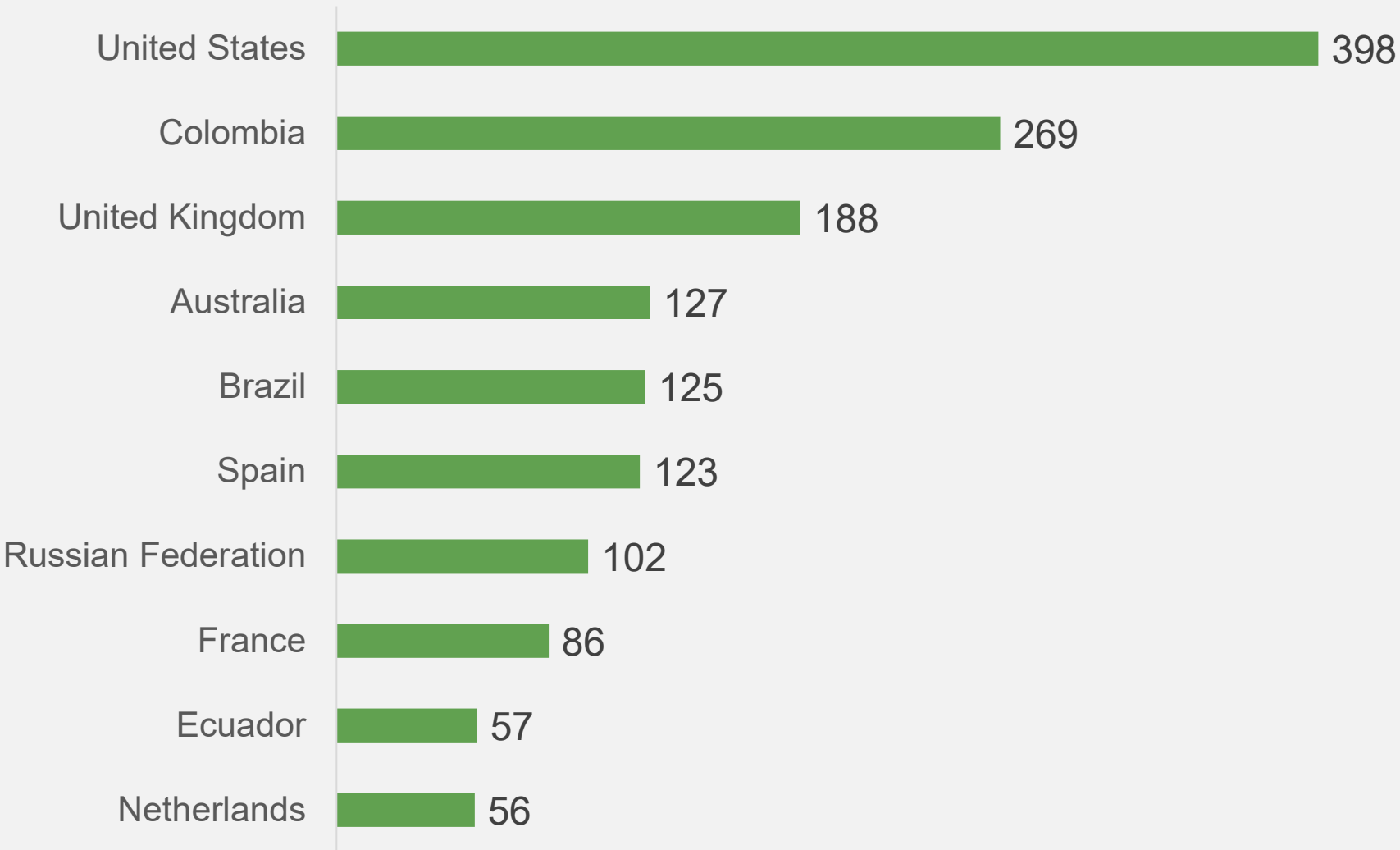
GBIF Participant countries



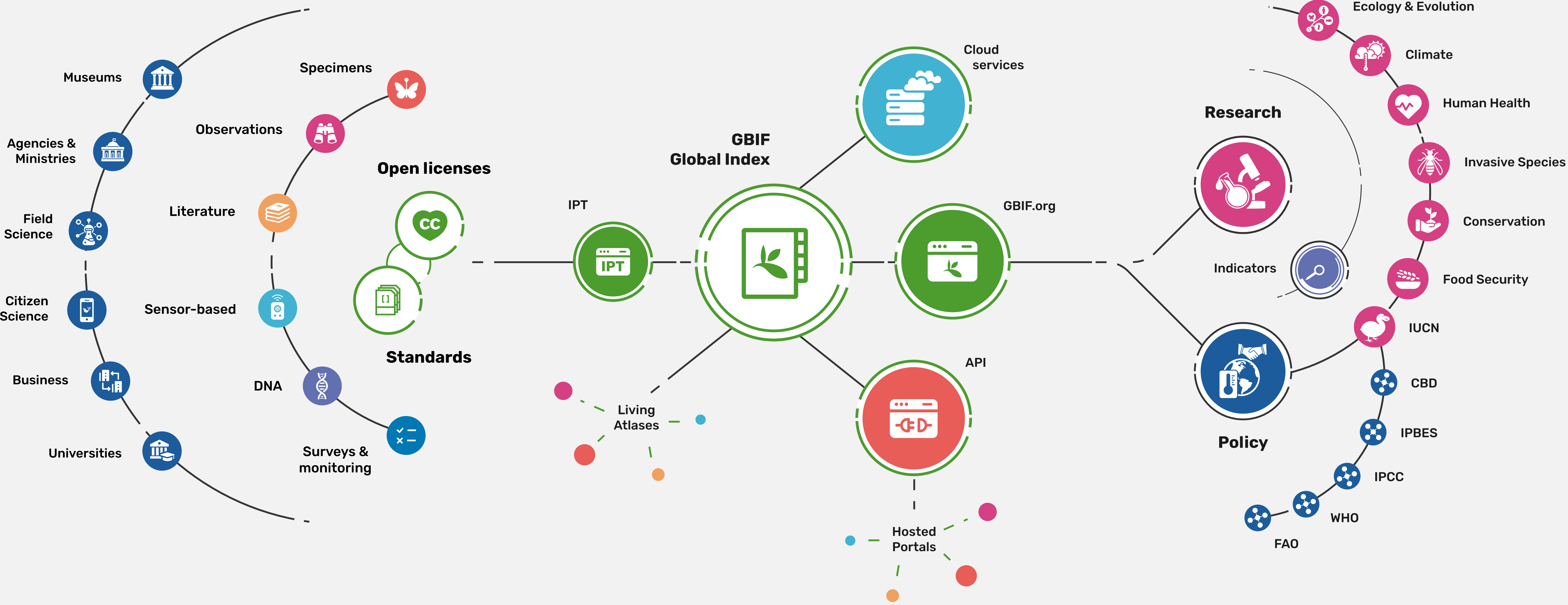
GBIF network of data publishing institutions

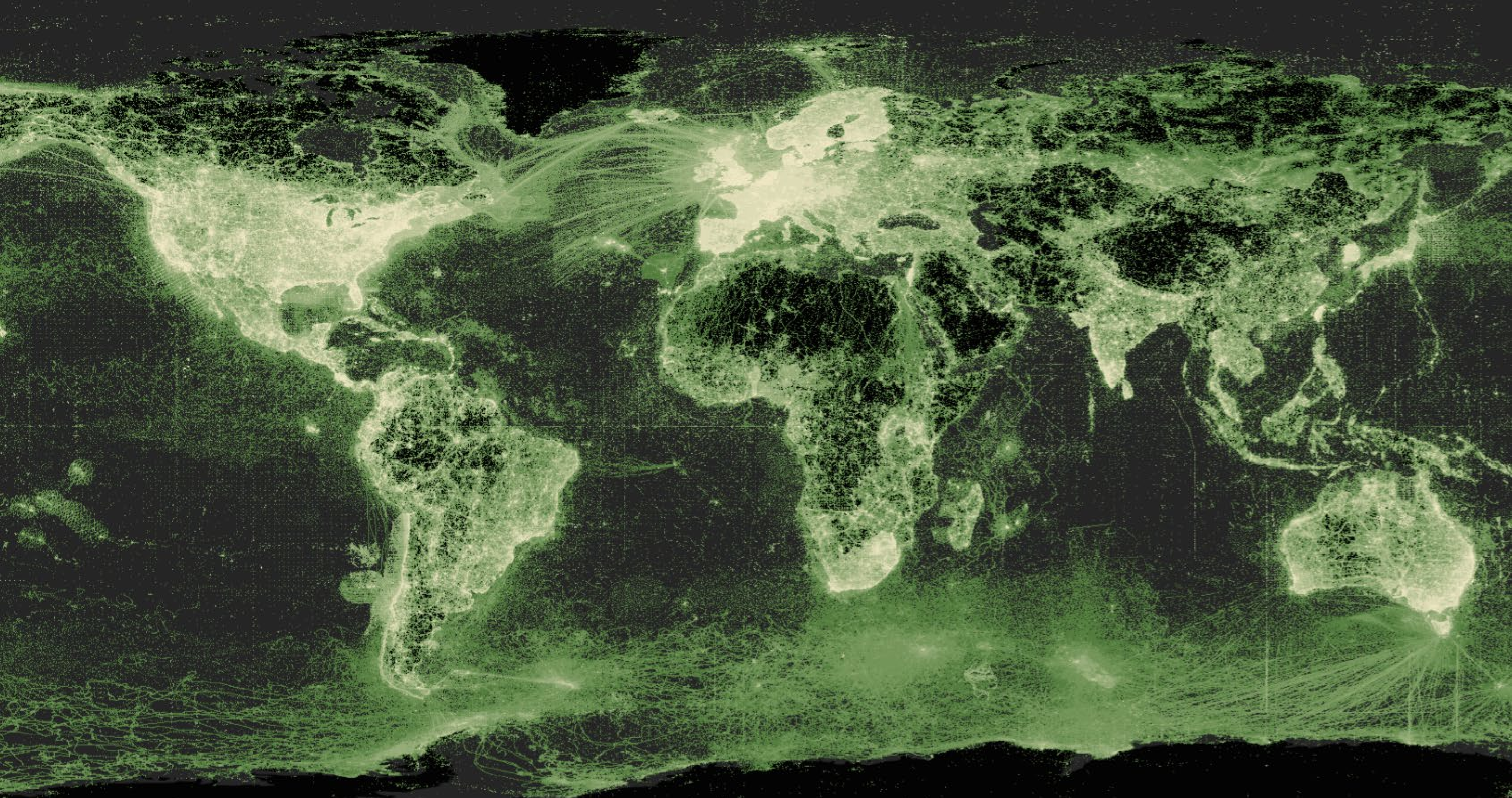
148

countries/areas with institutions sharing data through GBIF



Providing biodiversity evidence for research and policy



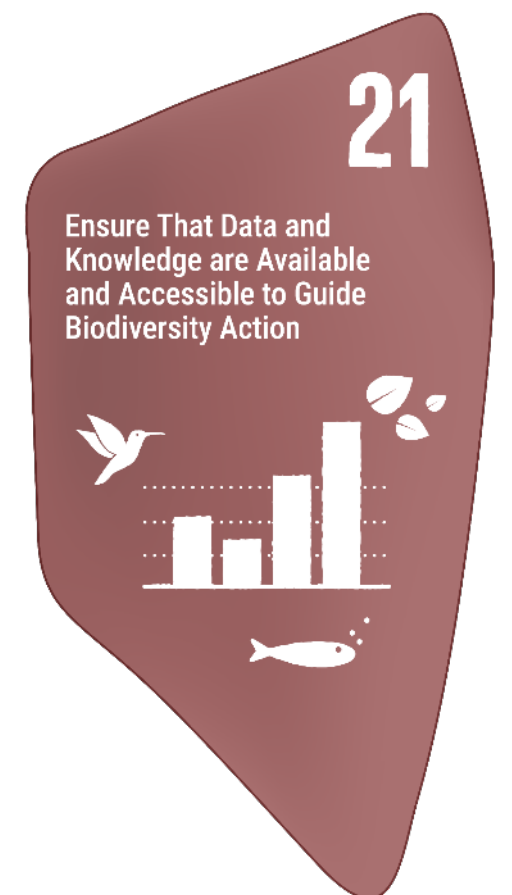
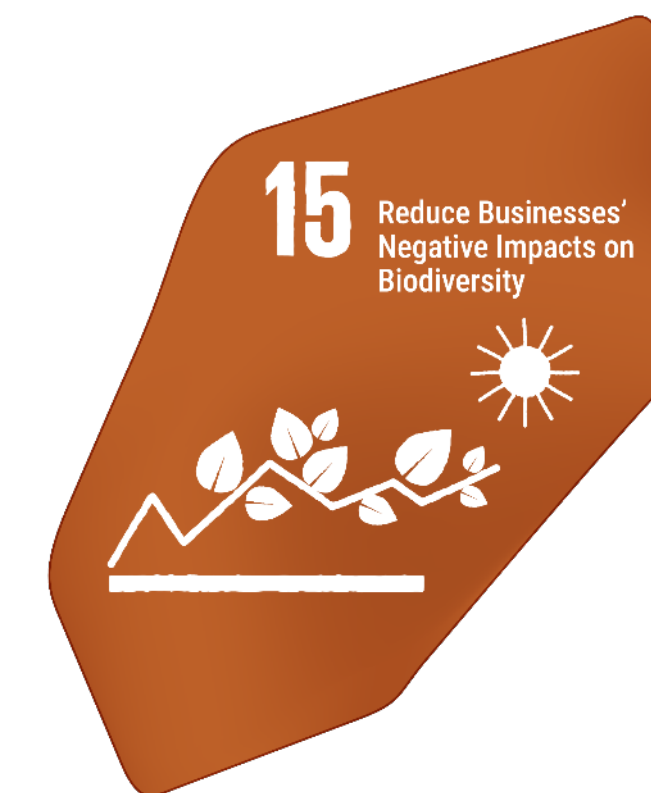
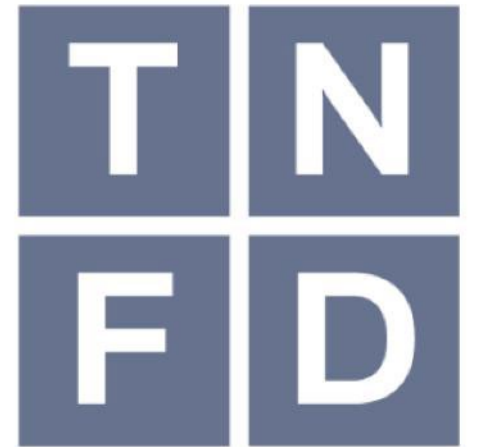


GBIF provides baseline data to be discoverable and easily accessible



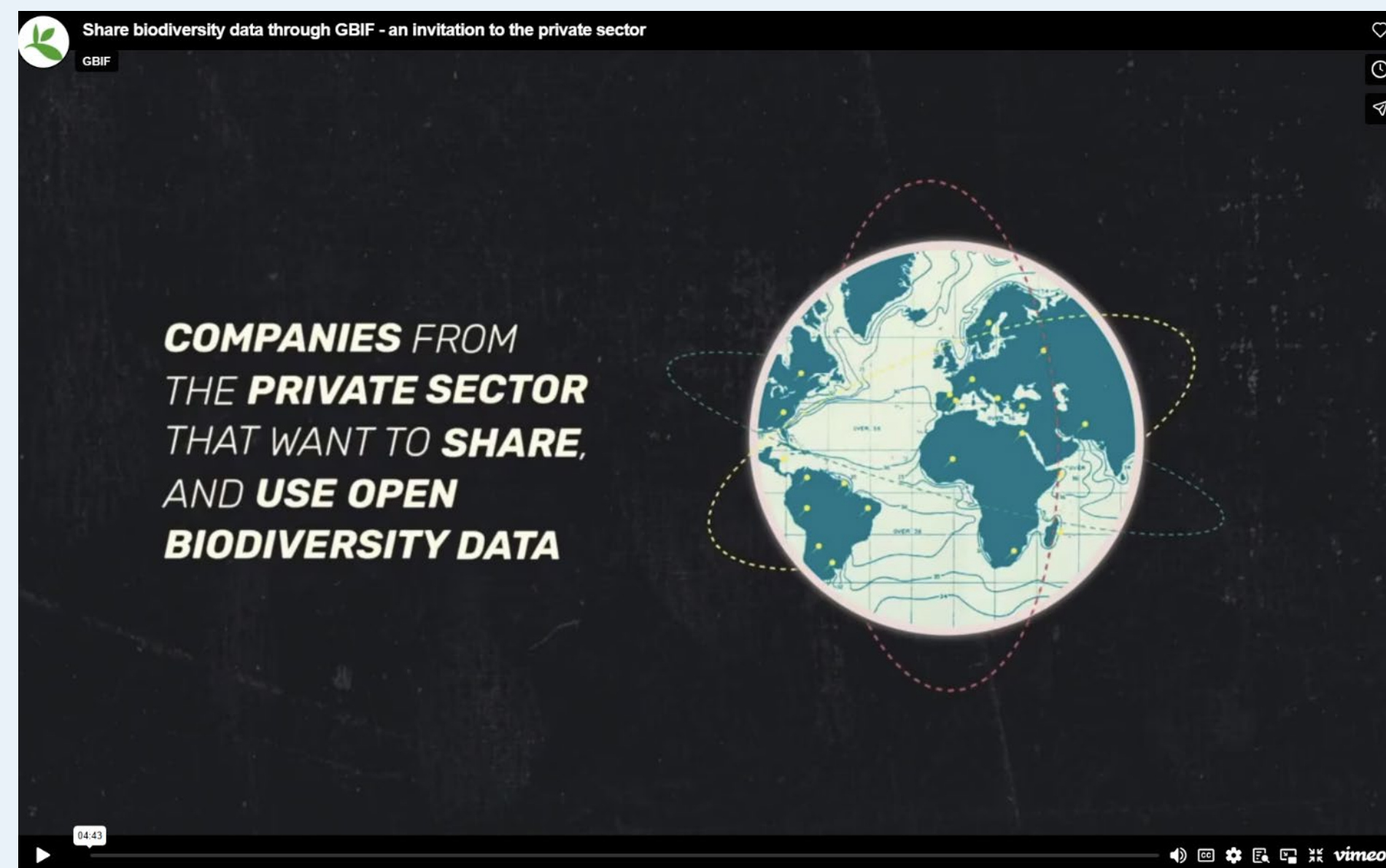
Benefits include:

- Improved management of data using data standards
- Transparency, accountability, and disclosure of assessments to stakeholders, regulators, and citizens and increased social license to operate.
- Long-term cost savings through decreased future survey efforts
- Supporting national and international frameworks
- Fill gaps and improve data coverage in under-sampled regions and sensitive ecosystems.
- More informed conservation reserve planning
- Optimising returns on offset investment decisions
- Positive reputation profile.
- Increased visibility



Supporting the publication of ESIa biodiversity data

OpenPSD project – providing multilingual materials to promote the sharing and use of data from the private sector
- English, French, Spanish, Portuguese, Norwegian



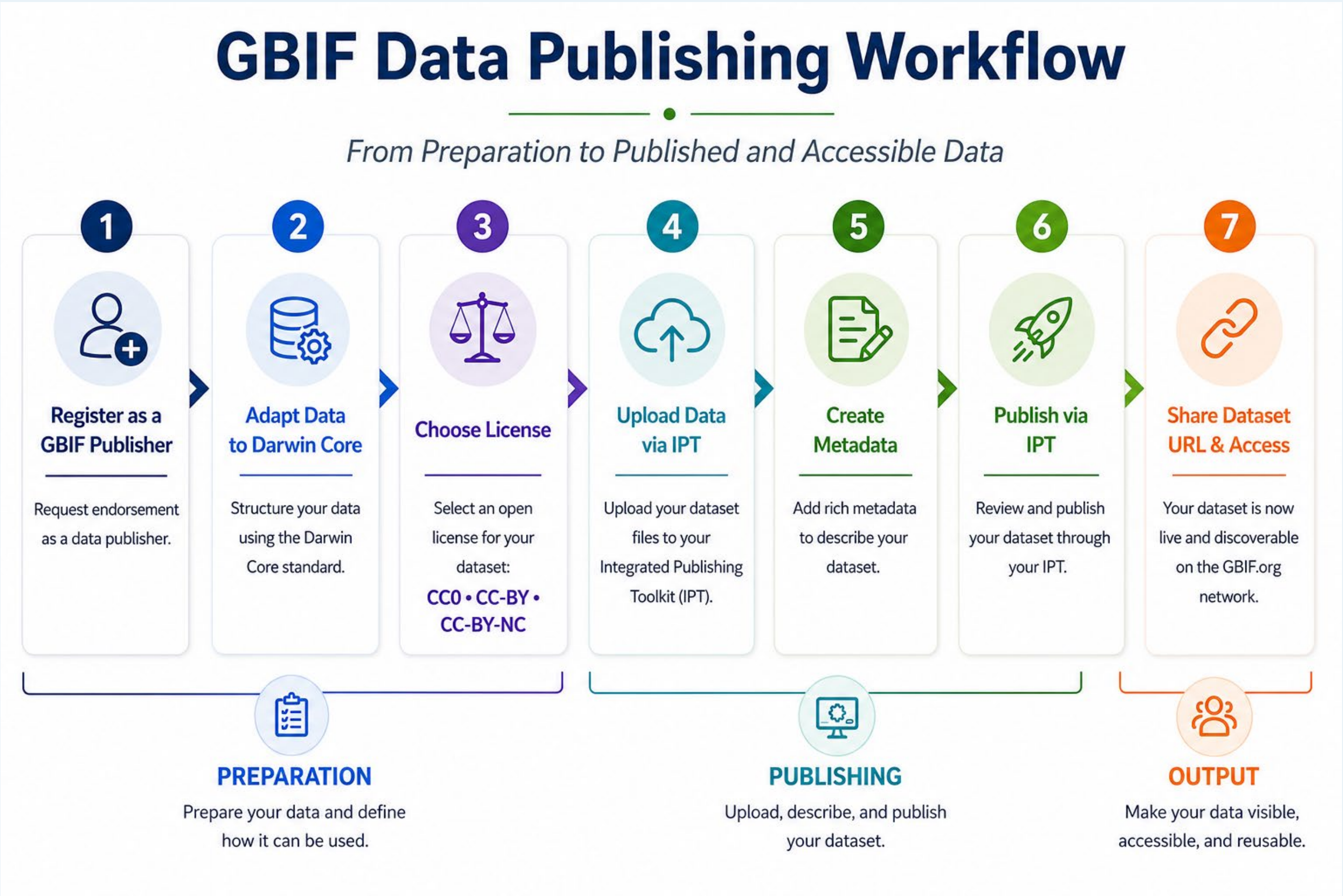
Supporting the publication of ESIa biodiversity data

Best Practices for Publishing Biodiversity Data from Environmental Impact Assessments

Andrew Rodrigues · Dag Endresen · Rui Figueira · Cristina Villaverde · Miguel Vega · Nick King · Asha Rajvanshi · Jo Treweek
– Version C62735d, 2021-01-20 08:33:18 UTC

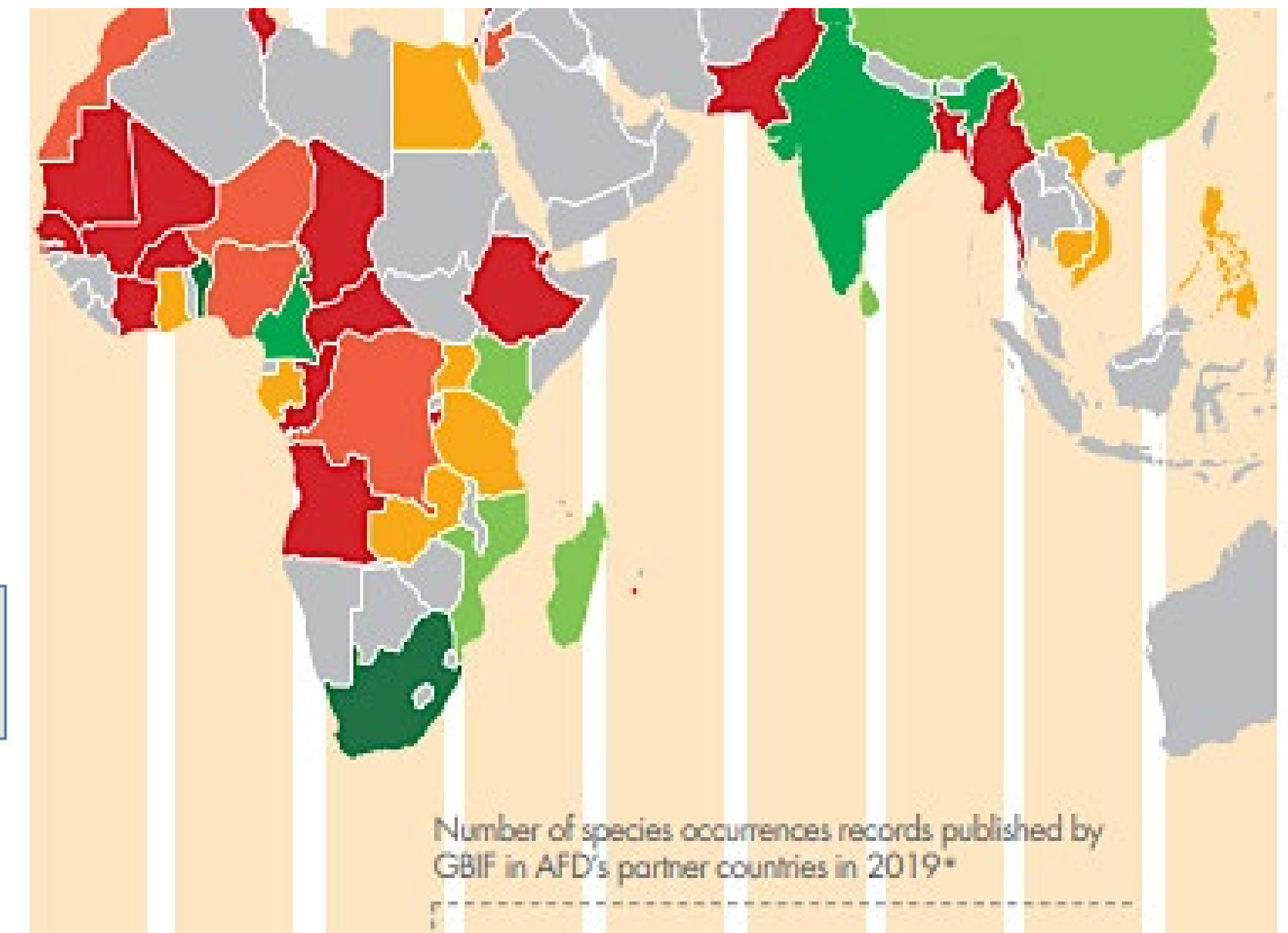
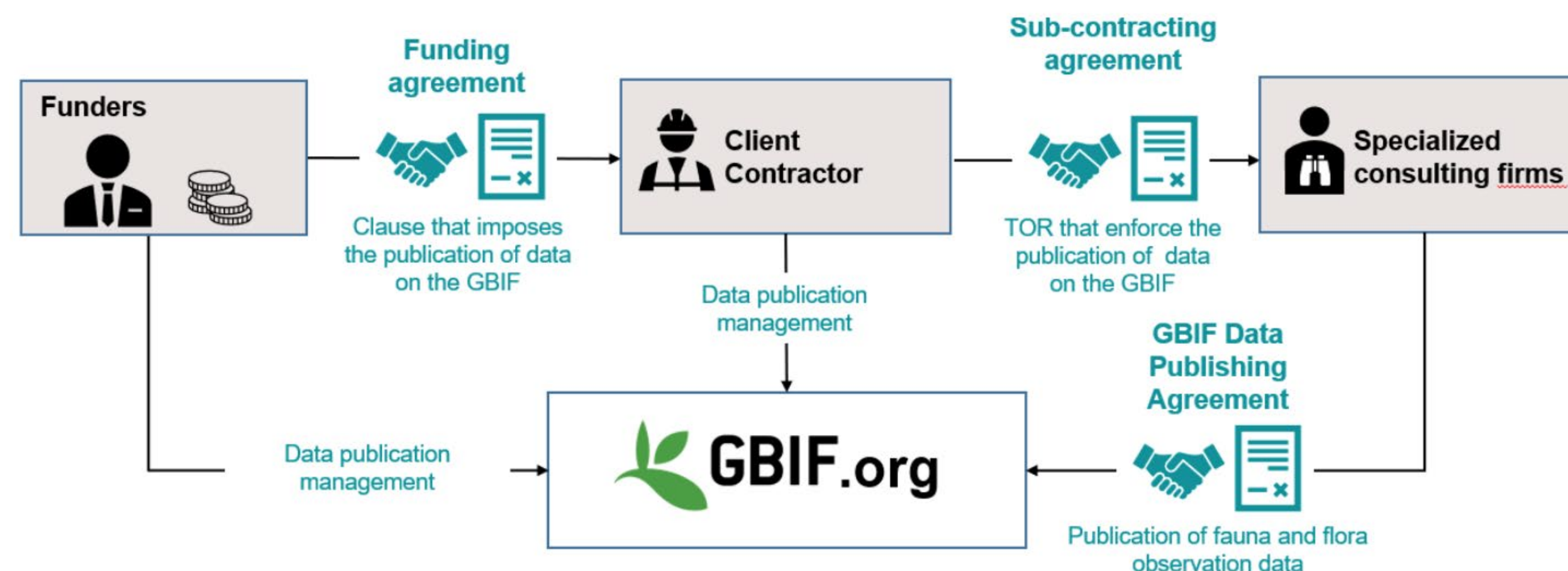
This document is also available in [PDF format](#).





Data4Nature

- Major public development banks estimated to produce over 300k species occurrence records each year, often in data - scarce regions
- Impact assessment data from top six PDBs could increase data available through GBIF annually by **15% in Africa** and **40% in Asia**
- D4N provides technical support, best practices, model contracts



GBIF and Safeguards



Screening & Categorization - can provide known presences (and, in some cases, absences) of species, including those of conservation importance (e.g., threatened or invasive species) at the proposed project



Environmental & Social Impact Assessment (ESIA) - can help assess the *state of nature before the project*, providing known species occurrences, including those of conservation importance



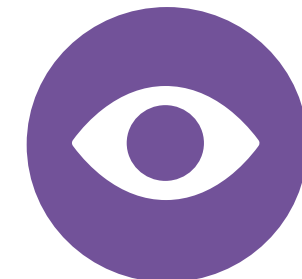
Safeguard Action Plans - can help design biodiversity indicators for monitoring “no net loss” or “net gain” by identifying where and what needs monitoring. Publishing monitoring data via GBIF facilitates compliance checks



Loan/Investment Conditions - GBIF-mediated data can provide evidence that clients are meeting biodiversity-related loan stipulations



Independent Review & Due Diligence - Independent datasets like GBIF reduce reliance on consultant-provided data



Monitoring & Supervision - an share monitoring data through GBIF to facilitate audits and adaptive management

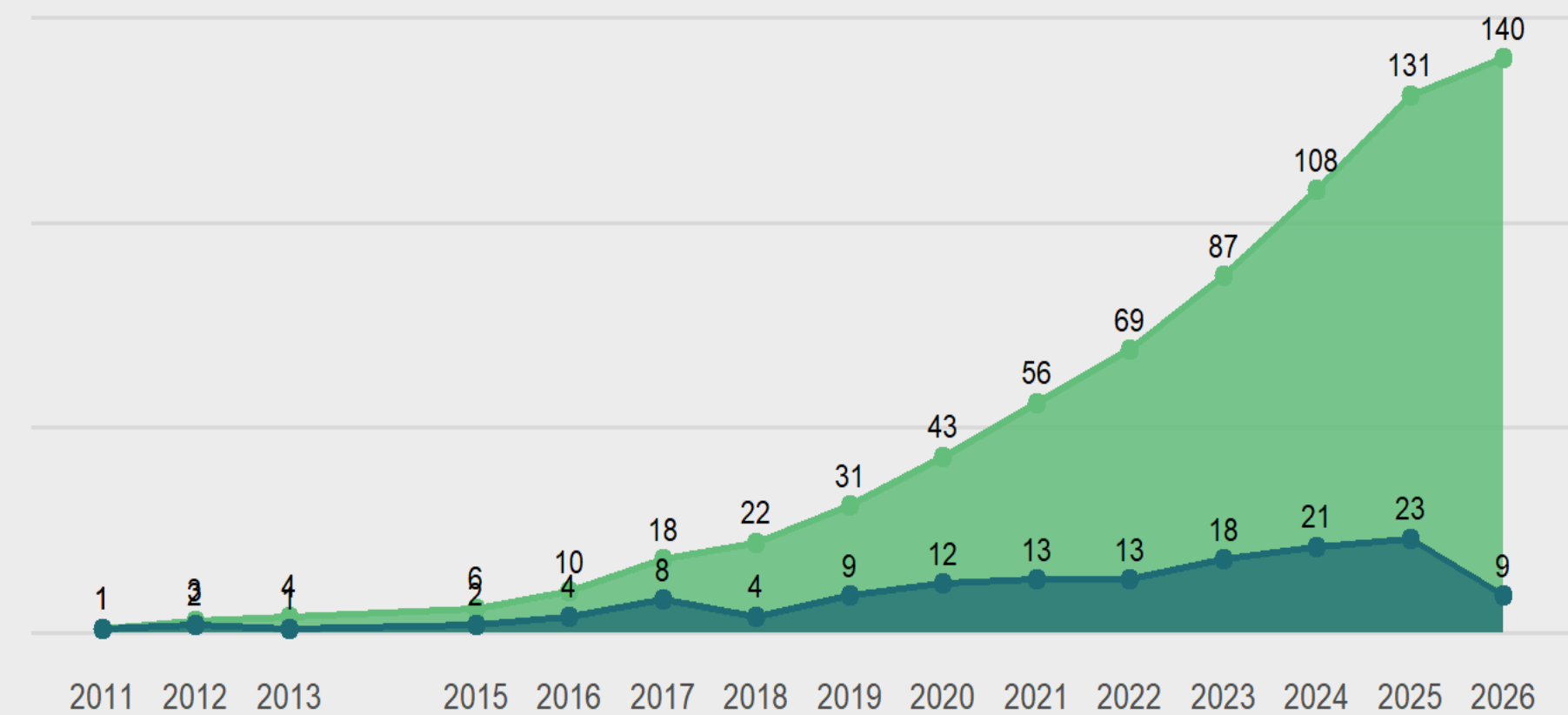


Grievance Mechanisms - can provide a data source for validating claims, especially when project data is shared through it



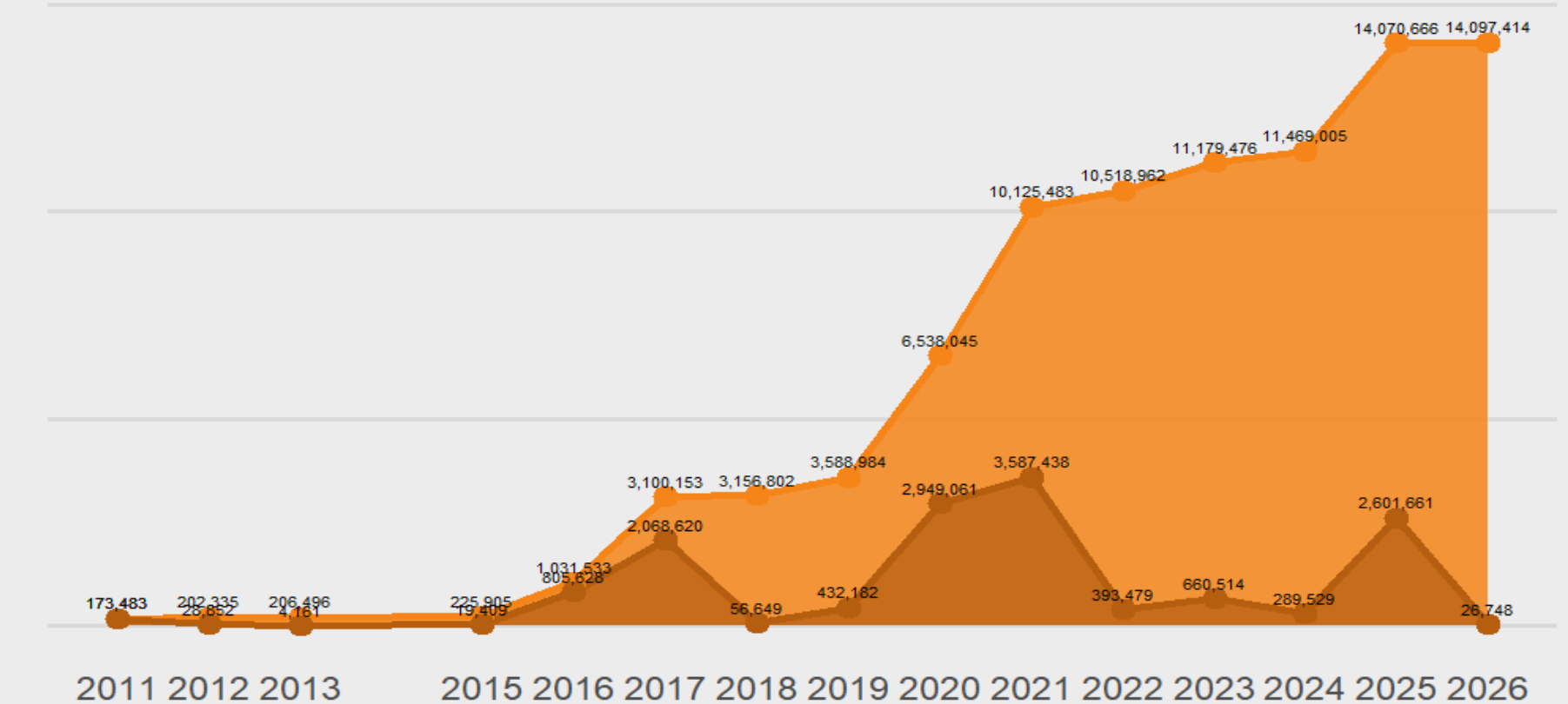
Business sector: organization publication

Organizations joining GBIF annually and cumulatively



Business sector: occurrence publication

Occurrence records contributed annually and cumulatively

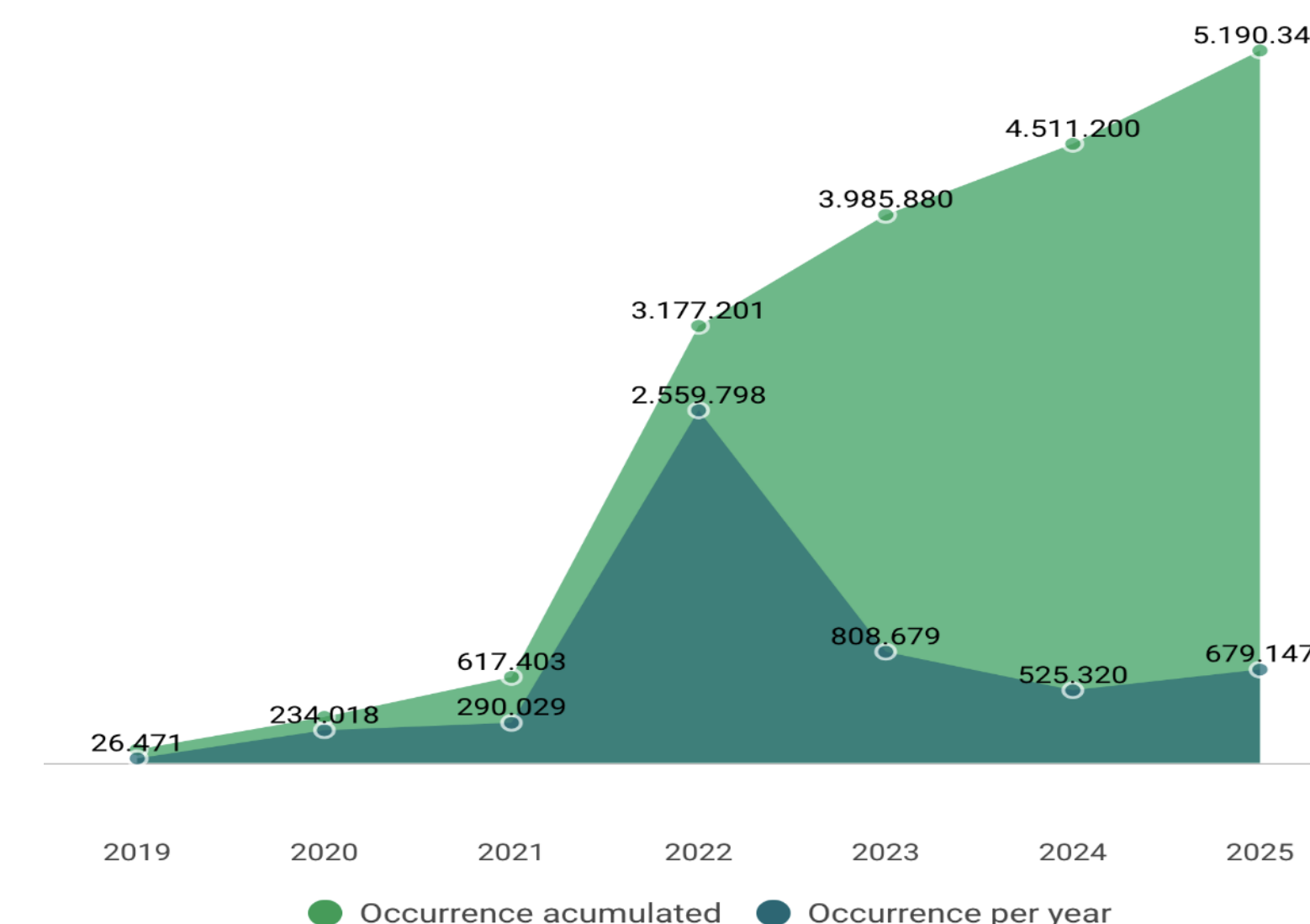
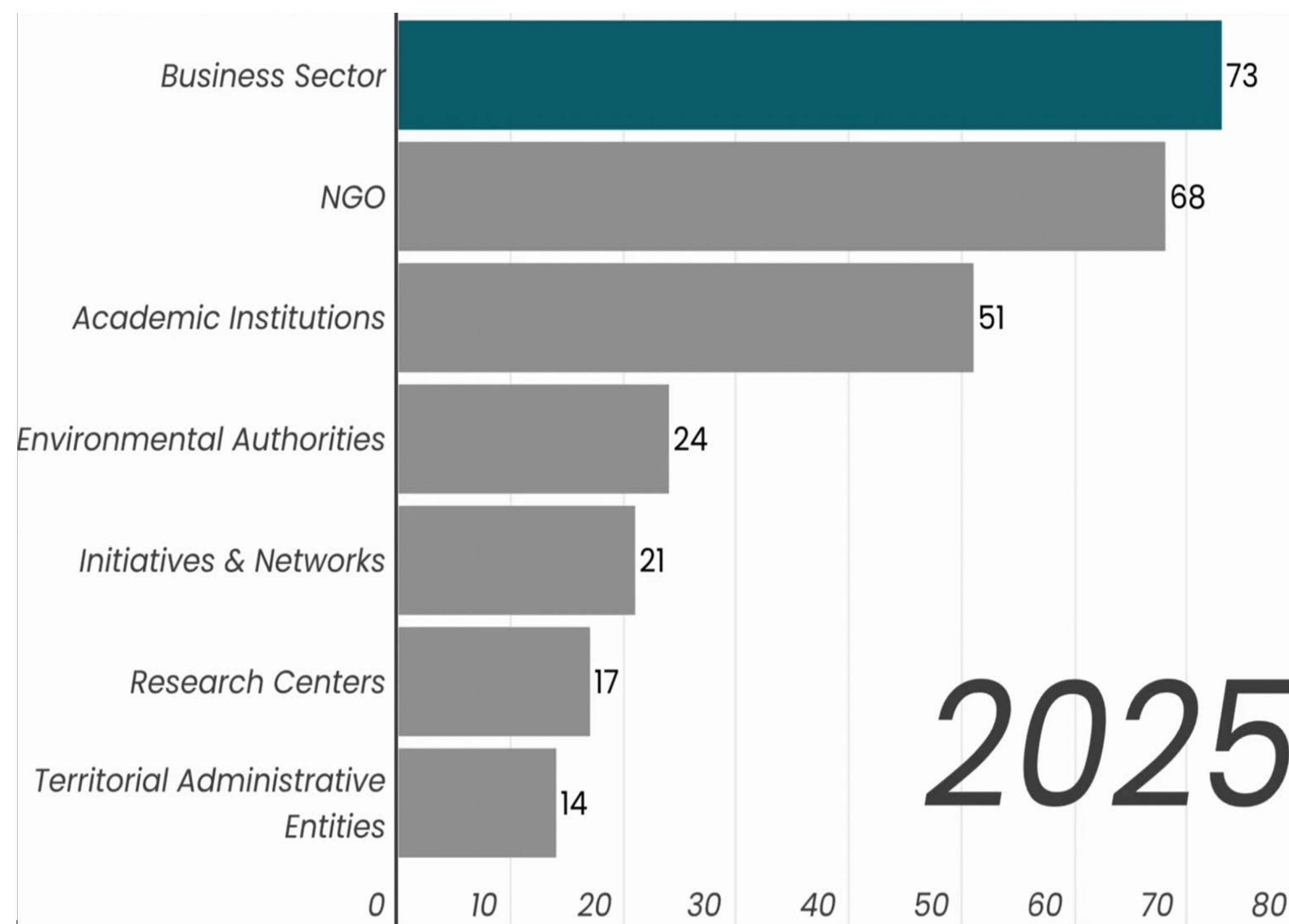


Data publication from the business sector

Company	Country	Datasets	Occurrences	Citations
Empresas Públicas de Medellín	Colombia	68	2,432,748	508
DNV	Norway	1	2,372,473	122
Metsähallitus	Finland	7	2,327,052	126
EDP	Portugal	120	1,867,245	818
Ecopetrol	Colombia	101	804,427	492
Biofokus	Norway	1	780,514	927
Parex Resources Colombia - AG Sucursal	Colombia	23	265,615	161
ISA INTERCOLOMBIA S.A E.S.P	Colombia	9	228,020	65



Business sector network growth at SiB Colombia



Number of organizations publishing data through SiB Colombia.

- Increasing the participation of the business sector within the GBIF network - 2019
- 266** organizations, **73** (27%) from business sector.



More data, less quality, less trust.....

- . Data quality is a shared responsibility
- GBIF works to improve data quality through:
 - developing data standards and facilitate common understanding through data harmonisation
 - Helping users discern data quality issues
 - Reducing data biases
 - Improving the traceability of data use through the use of Digital Object Identifiers (DOIs)
- The more diverse our community, the better we can respond to community needs



Reflections

- Impact assessment data is rich but messy and lost
- GBIF is focussing on improving data publishing and use of monitoring and metabarcoding DNA data
- While there is some traction in the use of GBIF's infrastructure in the business sector, committed engagement is required for further widespread adoption
- Tracking the use of the data is hard

3.1 Сүтқоректілер

Барлық бақылаулар кезінде екі сүтқоректілер түрі ғана кездескен: 7 жасөспірім түлкі (*Vulpes vulpes*) жол бойымен жүгіріп бара жатты, ал бес аналық сайга (*Saiga tatarica*) жолдан 100 м шығысқа қарай, шөптері мен тұзы мол кішкентай солонет батпақта жайылып жүрді (49.672110° 60.230422° 2-сурет). Бұл түр жыл сайын жол арқылы көші-қон шаблонуы белгісіз болғандықтан, маңызды мекендеу орны/басымдылықтағы биоәртүрлілік ерекшелігі болуы мүмкін. Әдеттегідей, олар жол қозғалысынан және Киакты қонысынан шыққан малдың түктерінен қорықпай, бұл аймақта тұрақты түрде жайылуды жалғастырды. Келесі сапарларда сайга қайта тіркелген жоқ.



Сурет 2 - 5 әйел киік татарикасының ерекше көрінісі, км1003 жолдан шығысқа қарай 100 м

Ескертпе: 2024 жылдың қыркүйек айының ортасында сиырлардың мал жайылымы аймағының пайда болуы; бұл келесі 3 сапар барысында қайта тіркелмеді.





Let's continue the conversation!

Message me your questions or comments in the IAIA26 app.

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