



BIODIVERSITY
BUILDING
BLOCKS FOR
POLICY

Standardising biodiversity data for improved policymaking: Introducing the B-Cubed project



Funded by
the European Union



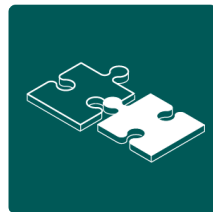
The B-Cubed Project

About



Challenges

The global biodiversity crisis requires **rapid, reliable and repeatable biodiversity monitoring data** which decision makers can use to evaluate policy.



Opportunities

Such information – from local to global level and within relevant timescales – calls for an **improved integration of data on biodiversity** from different sources.

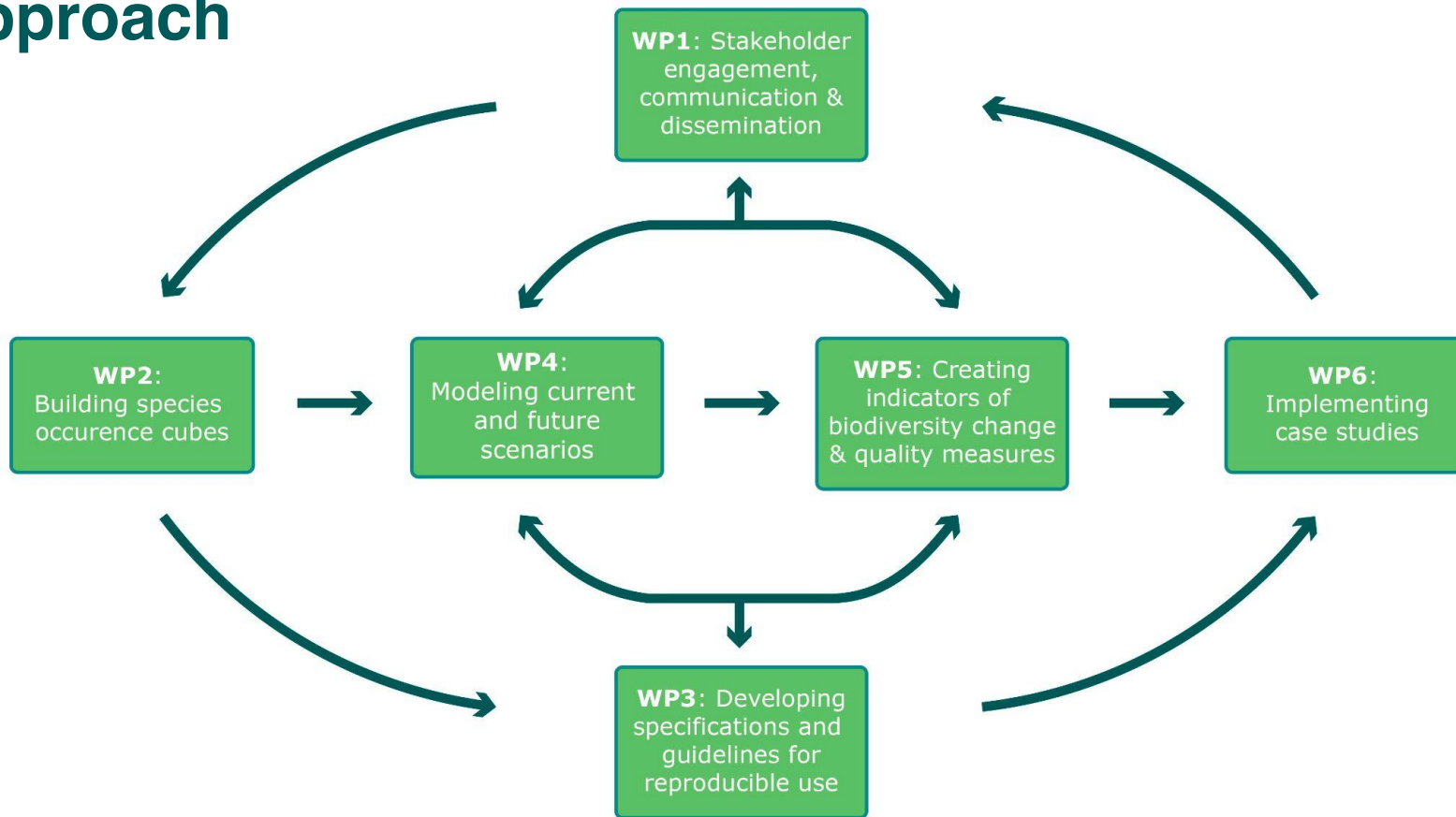


Aim

B-Cubed is **standardising access to biodiversity data**, empowering policymakers to address the impacts of biodiversity change.



Approach



Consortium



RESEARCH INSTITUTE
NATURE AND FOREST



Biodiversity Building Blocks for policy



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Solutions & Activities



Policy alignment

to enhance the use of biodiversity indicators in policy decisions



Evidence base

to provide fast access to up-to-date biodiversity data for policy



Automated workflows

to facilitate automated data aggregation and output



Cloud computing

to enable models of biodiversity at high resolution and frequency



Capacity building

to train in biodiversity informatics and cloud computing



Case studies

to test solutions' applicability and unite biodiversity informaticians





B-Cubed Solutions

Data & Evidence

B-Cubed aims to improve the existing policy evidence base and contribute to better alert systems by providing fast access to **pre-aggregated and modelled biodiversity data** and **standardised biodiversity indicators** responsive to the addition of new data.

BIODIVERSITY CUBES



Species occurrence cube



Suitability cube



Dissimilarity cube

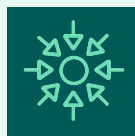


Network invasibility cube

BIODIVERSITY INDICATORS



Phylogenetic indicators



Impacts of alien taxa indicators



Robustness indicators



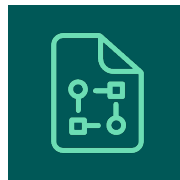
Workflows

To improve the access to rapid biodiversity data at a low cost, B-Cubed is **packaging known methods together into standardised workflows**. They can be run by anyone for any region and can be updated according to advances in data, methods and models.



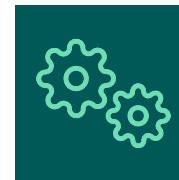
Exemplar workflows

Repeatable workflows to create data cubes



Deep learning

Automated workflows to calculate indicators from biodiversity data cubes



Automated workflows

Deep-learning to discover long-term spatiotemporal dependencies in species distribution models





B-Cubed Activities

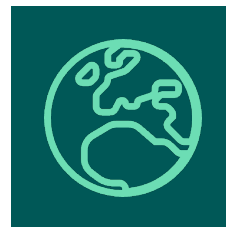
Policy alignment

To ensure an improved match between policy and the biodiversity data used to inform it, B-Cubed works closely with existing European and international biodiversity initiatives to **identify and address policy needs**.



European biodiversity initiatives

B-Cubed works closely with other European projects to identify data needs for policies and targets aligned with the new European Green Deal.



International science-policy convergence

B-Cubed is reviewing the existing policy and reporting needs by conducting a landscape analysis and consultation.



Capacity building

To ensure B-Cubed's tools meet openness standards and to **build better capacity in biodiversity informatics and cloud computing**, the project is developing a number of guidelines, training programs and activities.



Software requirements
and assessment



FAIR data products



Hackathon



Tutorials



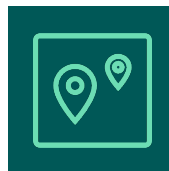
Training and support



Case studies

The application and usefulness of B-Cubed's algorithms and software are demonstrated through the project's **four case studies**.

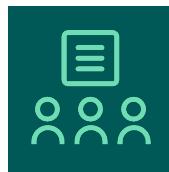
They cover different locations varying in geographical extent, biodiversity richness and data availability.



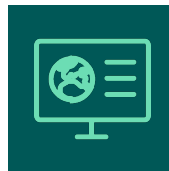
Regional indicators in Europe



Biological invasions in South Africa



Stakeholder-driven case study



Global and continental biodiversity change



Thank you!

Name of presenter

Contact



B-Cubed Newsletter



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