Our **vision** to take open science to the next level

- ● Science, policy & society
- ● Open & shared knowledge
- ● AI technologies

From present | To future

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Flow (From present)	Flow (To future)
Unequal access to scientific knowledge	Fair access to scientific knowledge
Uninformed policies	Nature-based policies
Compartmentalization across disciplines and countries	Multi - and transdisciplinary science
Black box	Transparency
Industry-oriented research	Society-oriented research
Centralized control over AI technologies	A democracy of knowledge through AI

CURRENT SITUATION	OUR VISION
Countries with limited data and technical capacity often lack access to scientific knowledge. Many are left behind due to cost or technology barriers. Technically advanced nations often struggle to diffuse their scientific knowledge.	**We enable the bridging of technical gaps** between countries, by providing access to integrated modelling in countries with limited technical expertise and training, while allowing countries with extensive experience to share data and models.
Incorporating state-of-the-art environmental data, models and understanding in decision-making remains a challenge. This is mainly caused by difficulties in accessing, evaluating and integrating existing information.	**Semantic web-driven environmental modelling** technology enables decision-making to more seamlessly benefit from the best scientific data and models. The resulting understanding of socioeconomic and environmental trends helps predict how today's decisions will impact tomorrow's society.
Ever-increasing volumes of data are held in silos – different disciplines, geographies, data types and access rights - making it challenging to connect information and make sense of it.	**We support participatory and collaborative** knowledge creation across disciplines and regions on a global scale, through a cloud-service environment, where producers and users can share scientific knowledge, data, methods and technology that are Findable, Accessible, Interoperable and Reusable (FAIR).
Public trust is one of the biggest hurdles faced by AI technologies. People struggle to accept the decisions and answers that AI-powered tools provide as many do not make their inputs, operations, and end goals visible.	**We build a basis for more trustworthy AI by** providing full transparency for replicable and traceable data, models, and methods used through our technology to obtain any results.
Most scientific knowledge is copyrighted by publishers and locked behind paywalls. This limits access to approximately 75% of scholarly documents[1], not only to scientists but also to the taxpaying public who have funded the science and, crucially, to less affluent institutions and developing nations.	**In an era of great environmental change,** damage and uncertainty, we provide tools to track global social and environmental progress towards the Sustainable Development Goals (SDGs) in an open way. AI technologies and the semantic web hold the key to a future where access to scientific knowledge is free and open, and where everyone can benefit from it.
The AI technology ecosystem is currently dominated by large technology companies. Although much software is open-source, access to data remains tightly controlled.	**We envision an ecosystem of connected** knowledge that acts as a commons, enabled by accessible and open-source AI technology, driven by shared semantics, and implemented as a peer-to-peer, open solution that places users and their interest firmly in the centre.

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k.LAB Knowledge Integrated Modelling

bc³ BASQUE CENTRE FOR CLIMATE CHANGE Klima Aldaketa Ikergai Sustainability, that's it!

EXCELENCIA MARÍA DE MAEZTU