**Project #2: Aligning climate and biodiversity goals**

The world just entered the “era of global boiling”1 with mounting biodiversity losses: it is more urgent than ever to limit global warming below 1.5C above pre-industrial levels and to prevent the destruction of ecosystems across the globe. Two annual international fora convey important scientific and policy messages. The first – the Conference of the Parties (this year COP16) to the Convention on Biological Diversity (CBD) – brings parties together to contribute to the implementation of the Biodiversity Plan (known as the Global Biodiversity Framework). The second – known as the United Nations Framework Convention on Climate Change (UNFCCC) COP29 – pushes for coordinated and globally shared action to act on climate change.

The integration between the two agendas is still far from being fully realized and disconnections between the two represent a critical issue. Multiple actors come together to ask for stronger alignment, but how assessments on critical disconnections remain hard to implement. Meanwhile, the lack of coherent and comprehensive joint policy framework between the UNFCCC and the CSB is leading to implementation gaps between two milestone declarations: the Kunming-Montreal Global Biodiversity Frsmework and the Paris Agreement. Artificial intelligence and the deployment of Natural Language Processing techniques can help.

The Master project will make use of Large Language Models to respond to three critical questions:

1. Are some issues inadequately tackled by both plans?
2. Can solutions to tackle one crisis can inadvertently make the other worse off?
3. Are there margins for improved alignment between the National Biodiversity Strategies and Action Plans, the Nationally Determined Contributions and the National Adaptation Plans so to achieve shared objectives?

The Master project will be supervised by Dr. Francesca Larosa and it falls within the scope and interests of the Horizon Europe Marie-Sklodowska Curie project (101150729) LIBRA.

Depending on the student’s background, the project can also develop a visualization platform to assess alignments in real time to support policy makers.

References

1. UN News. Hottest July ever signals ‘era of global boiling has arrived’ says UN chief. *Global Perspective human stories* (2023).