WorldTrans News

February 2024

TightRope Is Funded!

We now have Portugal, with PI Alex Koberle, with us in WorldTrans. WorldTrans proposed back in September to widen the team using EU's “Hop on” facility to include FCiências.ID, through its Research Center Instituto Dom Luiz at the Faculty of Sciences of the University of Lisbon, Portugal. Alex will come to join us at the WorldTrans workshop in Lillehammer, and Sarah and Cecilie are working on the amendment to our Grant Agreement. Hurray!

Abstract of TIGHTROPE Proposal

"The primary aim of the WorldTrans project is to unpack the mystery of Integrated Climate Assessment modelling and make the process of using such models more democratic and inclusive. Participation in WorldTrans is an opportunity for FC.ID scientists to engage with a society-facing transdisciplinary research agenda for the onboarding of natural sciences in social planning and policymaking, which is increasingly prioritized in Horizon calls for proposals. It will create a new line of research at FC.ID on Integrated Environmental Assessment and modeling, developing new methods to explore the societal relevance of environmental issues in educational settings, and creating opportunity for a new line of courses at the University of Lisbon. In addition, the Hop-on proposal will contribute to meeting the original WorldTrans objectives.

FC.ID researchers Camara, Trigo, Soares and Russo will provide expert knowledge in modelling and analysing the impacts of single or compound climate interactions, such as the drought - fires - health nexus, in several sectoral areas, namely in the energy, finance, economy, agriculture, and energy sectors. The strength of the feedbacks between the several sectors and the climatic constrainers will also be addressed. FC.ID researchers provide a wide range of complementary domain insights to System Tellus and will strengthen these publications by adding expertise across all IPCC WGs, but especially in WG3 (Köberle) which is underrepresented in the original WorldTrans consortium. FC.ID will bring five Early Career Researchers (ECRs) to the project: one Postdoc, two PhD students and two MSc Students. As the ECRs in WorldTrans already do, the FC.ID ECRs will work within and across Work Packages to ensure a truly interdisciplinary project."

EUROPEAN UNION #HorizonEU HORIZON EUROPE Hop on facility

INSTITUTO DOM LUIZ

Upcoming Events

1

Second Annual Workshop of WorldTrans

The second annual workshop of WorldTrans will be held at Hotel Nermo near Lillehammer from March 4, 2024 to March 8, 2024.

2

Webinars and Presentation Before the Workshop

As preparation before the second annual workshop of the project in Lillehammer (4-8 March 2024), there will be a series of presentations during the two weeks before the meeting.

Highlights from Building FRIDA

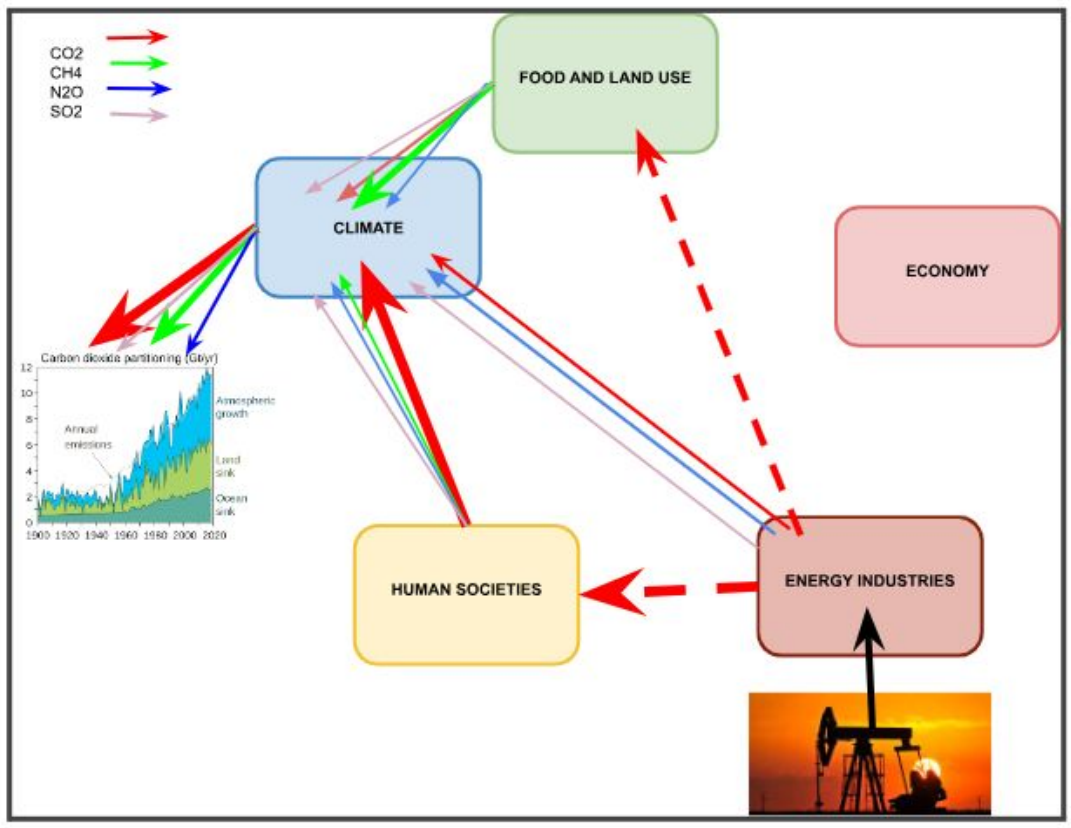

Figure 3: the greenhouse gas cycles in FRIDA. The stippled lines indicate that refined fossil energy (coal, gasoline etc) is used within the human societies and in the agricultural sector, giving rise to CO2 emissions in those sectors.

Documentation of FRIDA V1.0 is underway

FRIDA V1.0 is ready for analysis, and the documentation is progressing in a timely fashion, to be presented at Lillehammer and to be delivered to the EU in March-April. The documentation is divided into three tiers: Beginners, intermediate and expert level. The "beginner" level is a broad overview of how greenhouse gases, money and other information flows through and connect the modules, and a comparison to the similar level figures in IPCC. The intermediate level is a similar broad overview of the scientific content of each of the modules. And finally, in the expert level documentation we dive even further down into each model and document the model content at process and parameter level.

Highlights from using FRIDA

Work Package 4 of WorldTrans (led by Sarah Cornell) is fully dedicated to innovating the way IAMs are used. To that end we have established three "laboratories", to experiment (hopefully with a lot of successes and failures) with different methods for engaging. The three laboratories are: *Citizen Engagement* (led by David Collste), *Education* (led by Ada Gjermundsen) and *Decisionmaking* (led by Sibel Eker). These laboratories will be WP4's parallel to WP3's dev teams (that builds FRIDA).

The Education lab, which already has been arranged three times, uses the model itself as its primary tool, whereas the Decisionmaking lab will focus first on developing a fit-for-purpose Interactive Learning Environment (ILE). The Citizen lab (held for the first time Feb 8!) will experiment with a variety of tools, including causal loop design and card games. We expect that as we gain experience from the three labs, the scope will widen, the tools will be shared and external users will join the lab work. We expect that the labs will greatly contribute to all the important deliveries of WP4.

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Outreach and Communication

2

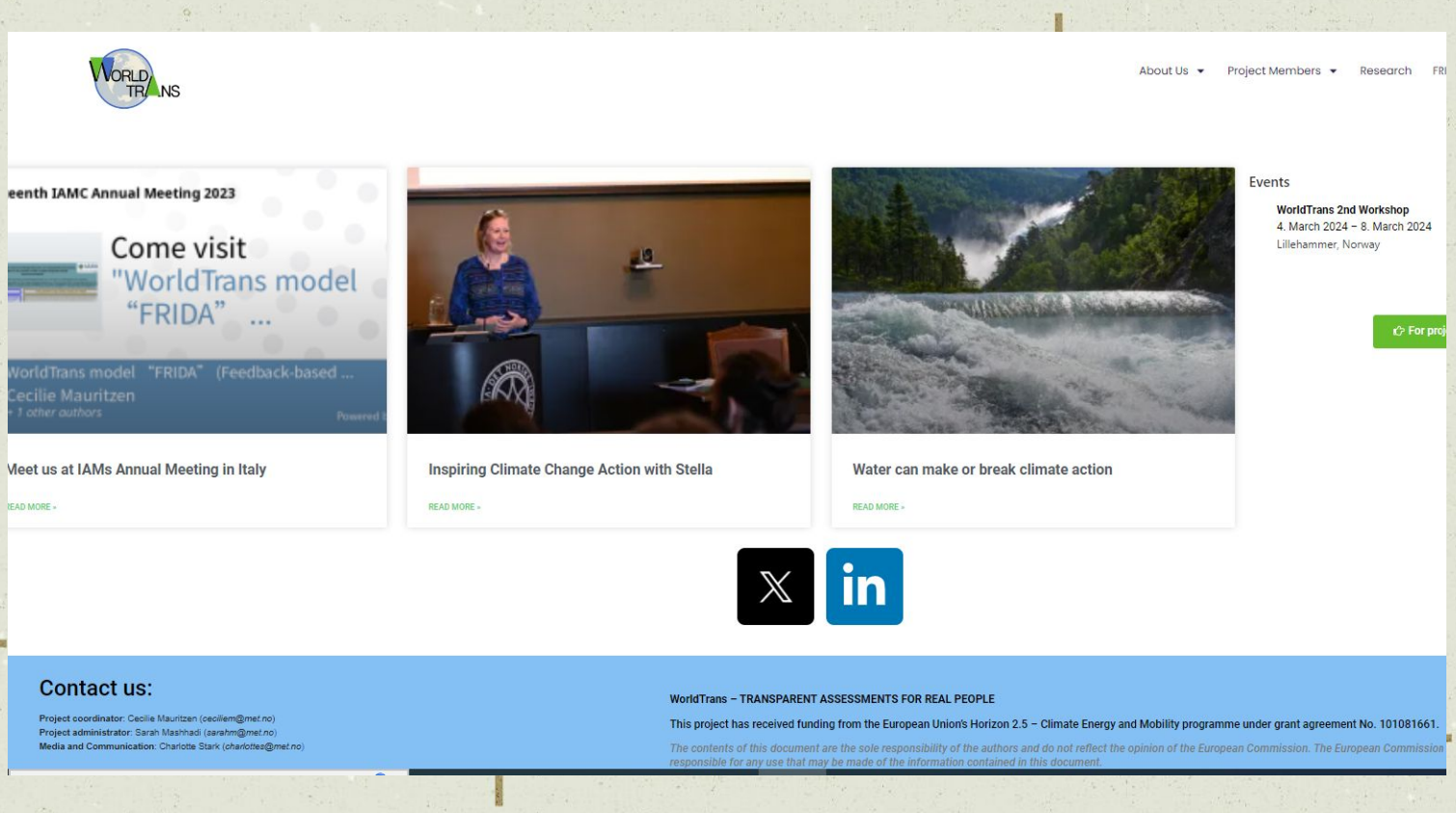
Social Media (Especially X)

Our main goal is to publish good stories and links to the target groups. By 30.01.04 we have 43 followers, most by other companies, projects, and our researchers.

1

Brainstorming Meeting to Update the Project Website

The WorldTrans website (worldtrans-horizon.eu) is being upgraded, led by our communication officer Charlotte Stark. The entire WorldTrans team was invited to join a brainstorming session in early February to suggest updates. The general feedback was that people were happy with the pages, and a number of constructive ideas was diligently collected by Charlotte, to be worked on in the next few months.



WorldTrans Trial Report for the First 12 Months Is Finished!

Horizon Europe (HORIZON)
Euratom Research and Training Programme (EURATOM)

Trial Periodic Report (Months 1-12) for WorldTrans

Technical Report (Part A)
Technical Report (Part B)
Financial Report

In order to be prepared for the first official periodic report of the project (months 18 in May 2024), all project partners worked together to provide a trial report for the first 12 months of the project (December 2022 to November 2023). This report was completely based on the template that the EU has provided for the official periodic reports, and has two parts, technical and financial. Thanks to the institutions for rapid and high-quality response! We will use this report as the starting point when we go on to prepare the first formal report, so hopefully that process is less painful.

Recent Publications

Peer-reviewed Papers

- Collste, D., Aguiar, A. P., Harmáčková, Z., Galafassi, D., Pereira, L., Selomane, O., & van der Leeuw, S. (2023). Participatory pathways to the Sustainable Development Goals: Inviting divergent perspectives through a cross-scale systems approach. Environmental Research Communications. https://doi.org/10.1088/2515-7620/acce25

- Eker, S., Wilson, C., Höhne, N., McCaffrey, M.S., Monasterolo, I., Niamir, L. and Zimm, C., 2023. A dynamic systems approach to harness the potential of social tipping. arXiv preprint arXiv:2309.14964 (link).

- Jeverall, J.P., Donges, J.F. and Otto, I.M., 2023. The Pareto effect in tipping social networks: from minority to majority. EGUsphere, 2023, pp.1-38 (link).

Conference Posters

- Smith, C. et al., 2023. FaIR v2.1: a calibrated, flexible simple climate model for integrated assessment. [Poster]. Integrated assessment Modeling Consortium, Italy, Venice.

- Swamy, D., Eker, S., 2023. Unraveling the Complexity of Urban Transport Behavior: A Qualitative Review of Factors Influencing Mode Choice in Developed and Developing Regions. [Online Poster] In: Annual meeting of the Integrated Assessment Modelling Consortium, 14-17 November 2023, Venice, Italy.