



ClimarisQ: a Smartphone game to highlight the complexity of the Climate Systems and the impacts of Extreme Events

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ClimarisQ is a **smartphone/web game** from a **scientific mediation project** that highlights the **complexity** of the climate system and **the urgency** of collective action to limit climate change. It is an app-game where players must make decisions to limit the frequency and impacts of extreme climate events and their impacts on human societies using real climate models. *ClimarisQ* has also **an educational tool that helps to understand:**

- The urgency of collective action to limit the adverse effects of climate change (The importance of limiting greenhouse gas emissions).
- The multiplicity of interacting climate components as well as the nonlinearities of the processes underlying climate dynamics (Delayed effects, amplification, rebound effects).
- The problems of predicting and projecting extreme weather events (Unpredictable locations and timing but predictable frequencies).

Explore the effects of mitigation and **adaptation choices to extreme climate events at the local, regional and global levels**. Could you achieve a greener trajectory than the IPCC RCP 4.5 emission scenario? Explore the feedback mechanisms (notably physical, but also economic and social) that produce extreme effects on the climate system. Make decisions on a continental scale and see the impact of these decisions on the economy, politics and the environment. Deal with extreme events (heat waves, cold waves, heavy rainfall and drought) generated by a real climate model. Try to balance the "popularity", "ecology" and "finance" gauges as long as possible. Fullfill all the missions to explore different climates.

The game-over displays both the PPM (parts per million) of CO₂ **deviation from the intermediate scenario of greenhouse gas emissions established by the IPCC (RCP4.5)**, as well as the number of survival game turns. These elements stimulate thinking about climate **change and motivate the player to do better next time**. Thanks to the hazards introduced by the extreme events and cards, every game is different!

Play/Download the game at: <https://climarisq.ipsl.fr/en/>

also available in French/English and Italian

