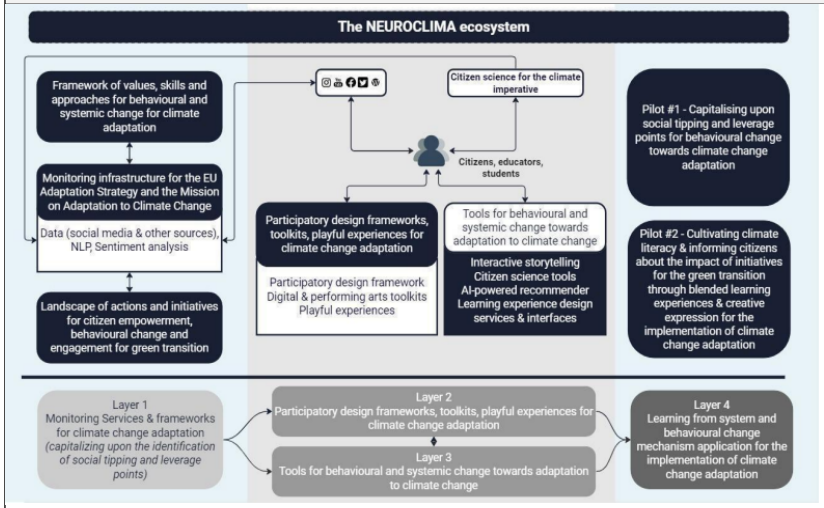
NEUROCLIMA (HTTPS://NEUROCLIMA.EU/)

Country	Contract value (€)	% carried out by Epsilon	No of staff provided	Client	Origin of funding	Date (start/end)	Consortium Members
Malta	3 986 716.25	8% 305 625.00	10	European Commission	EC Horizon HORIZON-CL5-2023-D1-01	01/01/2024 01/01/2027	15 Partners

Description of the project



The NEUROCLIMA project focuses on developing advanced climate modelling techniques by integrating neurocomputing approaches with traditional climate models. The project aims to improve the accuracy and resolution of climate predictions, enabling better decision-making for climate mitigation and adaptation strategies. NEUROCLIMA leverages machine learning and artificial intelligence to process vast amounts of climate data, refining predictions related to temperature, precipitation, and extreme weather events. By enhancing the precision of climate models, NEUROCLIMA seeks to support more effective responses to climate change, benefiting policymakers, researchers, and communities affected by climate-related impacts.

Neuroclima objectives are:

- To conceive a nervous system that monitors behavioural adaptation to climate change mitigation and evaluates social tipping dynamics at scale.
- To support the implementation of the EU Adaptation Strategy through framework, toolkits, recommendations and activities that address the climate imperative through participatory problem-solving approaches and support citizens' climate literacy.
- To design tools for the empowerment of citizens' and decision makers' participation in the Adaptation to Climate Change.
- To verify and validate the proposed solution through pilot demonstrations, evaluating the introduced novelties on representative use cases.
- To raise awareness about the proposed solution, provide best practices and recommendations for more efficient policymaking around the climate imperative, and exploit the project results in a sustainable way.

Services provided

For WP1: Project management and technical coordination.

- Ensured the continuous progress of the individual modules and the overall solution to ensure the achievement of the project's objectives.

For WP2: Requirements elicitation and vision for rethinking the climate imperative.

- Maximised user engagement in the development of the foreseen NEUROCLIMA solution.
- Conducted a detailed gathering of the technical, security and privacy requirements and an extensive review and analysis on the system requirements of each individual module, their interdependencies, the resources requirements.

For WP4: A climate-sensitive AI-boosted nervous system.

- Informed citizens about newly established measures, policies, climate-related actions and initiatives, letting them both read and provide feedback as well as express their opinions.
- Implemented the NEUROCLIMA front-end module and User Experience (UX) for participants to contribute to large-scale online climate- related dialogues.
- Exploited sustainable semantic web technologies and Linked Open Data initiatives.

For WP5: Integrated toolkit for climate-related policy co-creation.

- Provided a set of tools, approaches and activities for the co-creation of solutions, actions and activities among citizens, students, policy/decision makers for the establishment of systemic and behavioural change.
- Created of a set of interactive storytelling services and interfaces, aiming at informing, educating and shaping citizens' opinion around green transition and the EU Adaptation Strategy.