

POSTDOCTORAL POSITION TO STUDY THE EFFECTS ON GHG EMISSIONS OF CIRCULAR PRACTICES

Company Description

BC3 is a Research Centre on the causes and consequences of climate change. Led by one of the most recognized scientists in the Climate Change field -Prof. Maria José Sanz, we produce multidisciplinary knowledge to support decision making towards sustainable development at the international level. With a multidisciplinary team, connected to the main scientific institutions. networks and socio-economic agents, for a decade, our contribution to research of climate change and to the science-policy interface puts us in a unique position to offer knowledge, tools, new methodologies and crosscutting proposals, that we lead towards action in a collaborative framework with stakeholders, to design and help implement policies aimed at sustainable development.

Information

Company

BC3 Basque Centre for Climate Change



Main functions, requisites & benefits

Main functions

The Basque Centre for Climate Change (BC3), is looking for a post-doctoral researcher interested in (1) identifying on-farm and between-farm practices that increase circularity across different crop and livestock systems, (2) assessing the effects of circular practices on GHG emissions and other sustainability aspects, and (3) identifying barriers and opportunities for adopting promising circular practices, including leverage points for out-scaling. The position will be based at the Research Line of Terrestrial Ecosystems, in the Research group of Agriculture and Livestock systems, and is available for 36 months starting in March 2022. The candidate will develop her/his work within the framework of the CircAgric-GHG (Strategies for Circular Agriculture to reduce GHG emissions within and between farming systems across an agro-ecological gradient) project evaluated by on "Circularity in mixed crops and livestock farming systems with emphasis on climate change mitigation and adaptation" and funded by the 2nd 2021 call "Programación conjunta internacional 2021" MCIN/AEI /10.13039/501100011033 y por la Unión Europea NextGenerationEU/PRTR (ref. num: PCI2021-122048-2A). The researcher will be in charge of the coordination of different tasks: 1. To select representative farms across the project agro-ecological gradient, and gather individual and regional data in a standard form to build a single database (WP1); 2. To support the elaboration of an inventory with most promising circular practices (WP2); 3. To lead the evaluation of the effects of circular practices on GHG emissions and wider farm sustainability aspects (WP3); and 4. To support the modelling and identification of scaling. inter-system linkage and downstream effects associated with out-scaling circular farming practices (WP5). The position will be supervised by Dr. Agustin del Prado. The successful candidate will be based at BC3 but will be working in a highly multidisciplinary research environment in close collaboration with other institutions from the CircAgric-GHG coordinated project: Norwegian Institute of Bioeconomy Research (Norway), Bangor University (United Kingdom), Karslruhe Institute of technology (Germany) or The International Livestock Research Institute - ILRI (Kenya), among others.

Requisites

Experience/skills required: Given the multidisciplinary nature of the research we are seeking for a resilient individual with a Master's degree in environmental engineering, agricultural or environmental sciences and a PhD degree in agroecosystems modelling or any related topic. The candidate must demonstrate 5 years of expertise in environmental life cycle assessment (LCA) in agri-food products. Documented experience in modelling of farming systems is expected, and specific experience in climate change mitigation in ruminants, and valorization technologies for agri-food by-products (e.g. biogas, composting) is desirable. Hence, the candidate will have to demonstrate excellent skills in assessing GHG emissions and other environmental impacts from ruminant production systems by applying life cycle assessment (LCA) methodology and modelling approaches of carbon and nutrient flows across interlinked processes in the agri-food system. Mastery of specific LCA software is highly valued (i.e. Simapro), as well as programming skills. The candidate will also have to demonstrate ability for independent scientific work proven by a good publication record. A demonstrated ability to communication civils as experience in English is also required Success in the position also requires good communication civils as well as bility to