



Carbon Credits (CCs) calculator, for farmer to quantify and potentially exploit the commitment in the use of sustainable crop management practices

Agriculture can provide ecosystem services, which are the benefits to humans provided by the natural environment and properly-working ecosystems. For instance, sustainable crop management allows the reduction of greenhouse gas emissions compared to the usual practice.

In order for the farmer to get a remuneration for the service provided, avoided carbon emissions need to be calculated, verified, and then can be valorized in the voluntary market for Carbon Credits (CCs). There, CCs are sold to industries and individuals willing to voluntarily compensate for their emissions to mitigating climate change.

To give farmers access to this market, a protocol for calculating reduced carbon emissions and increased carbon sequestration linked to the agricultural activities was elaborated, with detailed methods and procedures to be applied.

Within Ploutos, farmers used the Decision Support System (DSS) vite.net® to implement sustainable vineyard management in their fields and record all crop operations. The DSS includes a functionality to calculate carbon emissions by the agricultural activity, allowing to calculate CCs obtained thanks to the sustainable crop management realized in field. The calculation takes into consideration all the crop operations registered in the system, accounting for the direct carbon emissions, as well as carbon sequestration, considering soil carbon dynamics. The calculation is site-specific, as it takes into account weather data and soil characteristics.

The DSS has thus the double role of providing decision support for implementing sustainable crop management and calculating of avoided carbon emissions linked to the implementation of sustainable cropping practices.



Description of project activities

The Ploutos project will develop a Sustainable Innovation Framework that follows a systemic approach to the agri-food sector, building on three pillars: Behavioural Innovation, Sustainable Collaborative Business Model Innovation and Data-Driven Technology Innovation. The project will deploy 11 Sustainable Innovation Pilots, where using a Multi-Actor Approach, new innovative solutions and methodologies will be implemented, tested, assessed and derive practical lessons learned. A Ploutos Innovation Academy will be established as a vehicle for integrating the know-how, best practices and assessments developed across the project and derived from the Sustainable Innovation Pilots.

 **33 Partners**

 **11 Pilots**

 **10 Countries**



Objective of the project

The main objective of Ploutos project is to help rebalance the agri-food value chain and enhance its sustainability (economic, environmental and social) by establishing a Sustainable Innovation Framework that is powered by an innovative combination of behaviour change, collaborative business model innovation and data-driven technological services.

PLOUTOS CONSORTIUM

