



## Enhancing Additionality Assessment of Carbon Credit of Various Interventions by Utilizing Site-Specific Historical Data in Compliance with IPCC International Standards

### Introduction

In carbon credit additionality projects, it is essential to use precise quantification methods to avoid incorrect estimations. In this context, within the framework of the OG CO2S.Fo.Ma, an international methodology based on the IPCC standards has been chosen as reference for the quantification of carbon credits. However, to arrive at a more accurate estimation of carbon credits, the international ICPP methodology has been linked with a site-specific methodology developed within the OG CO2S.Fo.Ma. The site-specific methodology takes into account site-specific data for each of the additionality measures proposed concerning the Business As Usual (BAU) scenario (e.g., converting coppice/stand, extending the harvesting rotation, and wildfire prevention). Indeed, the OG CO2S.Fo.Ma covered 9,000 hectares of forests managed in the past for which historical dendrometric data were already available. These historical data pertained to forest parcels managed in the past with practices similar to those proposed in the additionality measures. This enabled the adjustment of the IPCC models to the actual biomass and CO<sub>2</sub> increases recorded in the project areas. This approach allowed for more accurate carbon estimates and the calculation of additionality based on real growth data. From a credit quantification perspective, this approach is, therefore, more rigorous compared to the usual methods applied in other certification standards. In this context, the OG CO2S.Fo.Ma has also contributed to develop the national certification standard of PEFC for carbon credits that can be requested just if the forest are managed under the sustainable forest management PEFC national standard. Moreover, at the moment in Italy there is a National Carbon Credit Register.

## Lessons learned

In the context of carbon credits, it is necessary to have quantification methodologies for the carbon credits generated by additionality measures that are as rigorous and transparent as possible to avoid speculation. In this context, the OG CO<sub>2</sub>S.Fo.Ma worked to develop a methodology that aligns with the IPCC standards but is also informed by site-specific data. This was made possible because the forests had been managed in the past, and historical dendrometric data allowed for the quantification of the increases resulting from silvicultural interventions. The project highlighted that it is indeed active forest management that generates additionality and, consequently, carbon credits.

Furthermore, these evidence-based methodologies using real data ensure that the generated credits can be certified, particularly under the new PEFC standard in Italy, which is based on stringent methodologies compared to other standards.

## For further information contact

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The information presented in this factsheet was developed by the FOREST4EU partner, drawing on the innovations and knowledge generated by the indicated operational group with their explicit authorization.

## Further information

<https://www.co2marche.it/>



 <p><b>Funded by the European Union</b></p> <p>Funded by the European Union (Grant n. 101086216). Views and opinions expressed are however those of the authors only and do not necessarily reflect those of the European Union or REA. Neither the European Union nor the granting authority can be held responsible for them.</p>	 <p>UNIVERSITÀ DEGLI STUDI FIRENZE</p> <p>DAGRI DIPARTIMENTO DI SCIENZE E TECNOLOGIE AGRARIE, ALIMENTARI, AMBIENTALI E FORESTALI</p>	 <p>CO<sub>2</sub> S.Fo. Ma Marche</p>	<p>FOREST4EU</p> <p>Website</p> <p>  FOREST4EU Project   FOREST4EU Project   info@forest4eu.eu         </p> 
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