



LIFE COASE

Workshop on the role of carbon markets in reaching carbon neutrality

17 - 21 June 2023

14:00-15:30 | Session 2: EU ETS Models

Presenter: Jakub Boratyński (Centre for Climate and Energy Analyses (CAKE) in the Polish National Centre for Emissions Management (KOBiZE))

Title: Economic interaction between climate policy instruments

Abstract: In this paper, we explore and quantify the impact of complementary measures on EU ETS prices, macroeconomic and sectoral variables using a set of modelling tools. The set includes a global CGE model (dPLACE), an energy system optimisation model (MEESA), a transport demand simulation model (TR3E) and an agricultural sector model for farm optimisation (EPICA). The four models are linked and solved in an iterative process to ensure consistency of the solution and a coherent picture of the transformation path in each simulation scenario. We examine the impact of two policies: the pricing of negative emission technologies (NET) and subsidies for the use of green hydrogen. Our simulation shows that the pricing of negative emissions leads to a decrease in the price of allowances in the EU ETS from 880 EUR/tCO₂ to 310 EUR/tCO₂ in 2040 and a significant increase in consumption at the macroeconomic level (by 0.9% in 2040 in the EU). The subsidies to green hydrogen leads to a further decrease in the price of allowances to 280 EUR/tCO₂ in 2040, but its impact on consumption is negative, at least in the short term.

Webpage and programme [here](#).



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