

## Volatility Dynamics in EU Climate Benchmarks

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### Abstract:

Investing strategies and sustainability are increasingly being combined. Environmental activism has a significant impact on and promotes the ideas of sustainable, responsible investing. Retail and institutional investors consider the potential long-term effects of their financial choices on the environment. It provides the motivation to include environmental factors in financial plans. Implementing a green labeling system can ease investor concerns. Buying stocks associated with the Environmental, Social and Governance (ESG) aspects of financial markets also has the potential to yield greater returns than standard financial investments. If this asset class demonstrates the benefits of diversification or has safe-haven qualities, this will further encourage investors worldwide to include it in their portfolios. To achieve this goal, a deeper understanding of volatility dynamics and the dependence structure of sustainable asset returns is required.

The behavior of the sustainable investments market in periods of market upturn and downturn is of great importance: if there is evidence of diversification benefits or safe-haven characteristics of this asset class, it will provide a further incentive for its inclusion in the portfolios of retail and institutional investors around the world.

To this aim, the application of parametric models to describe the volatility of sustainable asset time series and the evaluation of their goodness of fit is of great interest for all market participants (e.g. retail and institutional investors) in order to provide them accurate forecasts of future volatility. The