# Department SEMINARS



## Curbing Energy Consumption through Voluntary Quotas: Experimental Evidence

#### MARCO CATOLA

University of Pisa

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#### ABSTRACT

This paper explores the potential of voluntary consumption quotas as a strategy to address resource supply shortages. The results of an incentivized online experiment are presented in which a Nash demand game was used to model an energy consumption problem. Participants had the option to join an energy conservation programme by accepting a consumption quota. Those who accepted the quota traded off their maximum demand for energy in exchange for the certainty that their demand would be met, while those who rejected the quota could demand and possibly earn more but risked suffering from a power outage, in which case they received nothing. Three different quota schemes are examined, and their policy implications are discussed. Our findings suggest that voluntary quotas may lead to a significant decrease in overall demand and contribute to enhancing consumption security.

For information: pietro.battiston@unipi.it